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**DEPARTMENT OF DEFENSE  
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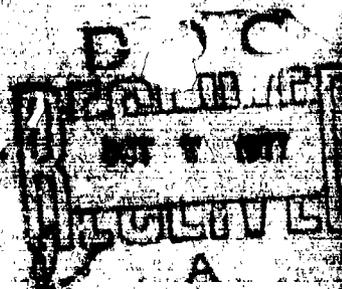
**30 October 1971**

**Management Analysis Report**

Department of the Army

Department of the Navy

Department of the Air Force



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DEPARTMENT OF DEFENSE IN-HOUSE RDT&E ACTIVITIES

and

Harold F. Davidson

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30 October 1971

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Management analysis report

Office of the Chief of Research and Development  
Department of the Army  
Washington, D.C. 20310

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FOREWORD

This report was prepared by the Department of the Army at the request of the Director of Defense Research and Engineering. The Departments of the Army, the Navy and the Air Force provided comprehensive data on the finances, manpower and facilities of their organizations that perform research, development, test and evaluation (RDT&E). In addition, they briefly described each activity's mission, current important programs, functions, and equipment capabilities. The statistical data relate to the past and current fiscal years, i.e., 1971 and 1972.

Each in-house RDT&E activity of the Department of Defense is described on one page in this compilation. The data for FY 1971 are summarized in tables preceding the main text.

This edition is the sixth of a series that started in 1966. All information was submitted on key-punched cards, and the report's preparation was thus entirely automated--with some manual correction of typographical errors and clarification of obscure abbreviations and contractions. The computer that produced the printed pages had no ampersand (&) and, instead, usually printed a plus sign (+) for the word "and."

All current DoD RDT&E activities are listed in the Contents alphabetically within each Department. Some new organizational names appear in this issue, and others have been changed since last year; for this information, see Appendix I.

Appendix II contains the definitions given in DoD Instruction 7700.9<sup>1</sup> and employed as the basis for these data. Appendix III lists selected standard abbreviations and acronyms.

Thanks are extended to Mr. John J. Ruddy, Air Force Data Services Center, Department of the Air Force, and Mr. Donald J. Ertel, Office, Chief of Research and Development, Department of the Army, for their kind assistance.

<sup>1</sup>DoD Instruction 7700.9, "Research and Development Resource Data for In-House RDT&E Activities," dated 26 August 1970.

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SUMMARY

DEPARTMENT OF DEFENSE IN-HOUSE RDT+E LABORATORIES

PROGRAM DATA FOR FY 1971 (ACTUAL)

	(MILLIONS \$)
TOTAL ANNUAL LABORATORY PROGRAM	3771.659
TOTAL INHOUSE PROGRAM	2130.426
TOTAL RDT+E PROGRAM	2442.641
TOTAL INHOUSE RDT+E	1361.942
TOTAL ANNUAL OPERATING COST	573.287

PERSONNEL DATA (END OF FY 1971)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD	TOTAL PROFESSIONALS
MILITARY	28671	1069	8786
CIVILIAN	81879	2675	28687
TOTAL	110550	3744	37473

PHYSICAL FACILITIES (END OF FY 1971)

ACRES.....	8616097
SPACE (THOUSANDS OF SQ FT)	
LABORATORY.....	28750.557
ADMINISTRATIVE.....	9243.119
OTHER.....	53033.189
TOTAL.....	91826.865
COST (MILLIONS \$)	
REAL PROPERTY.....	3509.328
EQUIPMENT.....	3756.106
TOTAL.....	7265.434

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TABLE 1. ARMY RDT+E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1971

INSTALLATION	FUNDING DATA (MILLIONS \$)		PERSONNEL DATA	
	TOTAL	IN-HOUSE	TOTAL	PROF
	TOTAL	RD+E	MIL	CIV
AEROMEDICAL RESEARCH LAB., FT. RUCKER, ALA.	1,550	1,552	48	1
AIRBORNE, ELECTR. AND SPECIAL WARFARE BD., FT BRAGG NC	4,192	4,192	285	55
AIR DEFENSE BOARD, FT. BLISS, TEX.	6,234	3,693	354	114
AIR MOBILITY RSCH AND DEVEL LAB. MOFFETT FIELD, CALIF	37,889	24,113	55	551
ARCTIC TEST CENTER, FT. GREELY, ALASKA	4,762	2,221	333	27
ARMOR AND ENGINEER BOARD, FT. KNOX, KY	4,684	1,854	431	98
ARMY MATERIAL SYST AND ANAL AGENCY, ABERDEEN P.G., MD.	13,856	8,261	13	314
ARTILLERY BOARD, FT. SILL, OKLA.	3,668	3,538	389	39
ATMOSPHERIC SCIENCE LAB. WHITE SANDS, NEW MEXICO	12,795	18,023	516	253
AVIATION TEST ACTIVITY, EDWARDS AFB, CAL.	3,817	3,768	75	1,61
AVIATION TEST BOARD, FT. RUCKER, ALA.	7,641	5,256	258	139
AVIONICS LABORATORY, FORT MONMOUTH, N.J.	14,285	11,813	38	289
BALLISTIC RES. LGS., ABERDEEN PROVING GROUND, MD.	24,985	24,379	76	724
BEHAVIORAL SCIENCE RES. LAB., WASH., D.C.	2,721	2,721	4	83
BIOLOGICAL LABS., FT. DETRICK, MD.	28,835	18,547	77	218
COATING AND CHEMICAL LAB., ABERDEEN PROVING GROUND, MD	2,827	2,591	5	44
COLD REGIONS RSCH + ENGR LAB, HANOVER, N. H.	6,266	5,582	41	218
COMBAT SURVEILLANCE GROUP, FT. MONMOUTH, N.J.	9,378	9,378	67	283
COMMUNICATIONS ADP LAB. FORT MONMOUTH, N.J.	31,889	15,307	33	355
CONSTRUCTION ENGR. RESEARCH LAB., URBANA, ILL.	4,828	3,684	3	141
DESERT TEST CENTER(LABS) DUGWAY, KENT, UTAH	15,791	18,878	468	1899
DEVELOPMENT AND PROOF SERVICES, APG, MD.	26,921	26,662	232	1131
EDGEWOOD ARSENAL LABS., EDGEWOOD ARSENAL, MD	41,935	37,492	288	1322
ELECTRONICS PROVING GROUND, FT. HUACUCA, AP12	25,983	14,882	449	268
ELECTRONIC TECHNOLOGY + DEVICES LAB, FT MONMOUTH, N.J.	8,688	8,622	17	452
ELECTRONIC WARFARE LAB, FT MONMOUTH, N.J.	2,815	5,144	89	328
ENGINEER TOPOGRAPHIC LAB., FT BELVOIR, VA.	15,911	18,722	15	229
ENGINEER WATERWAYS EXPERIMENT STA., VICKSBURG, MISS.	34,283	25,158	13	1188
GENERAL EQUIPMENT TEST ACTIVITY, FT. LEE, VA.	4,515	2,259	286	95
HARRY DIAMOND LABS., WASH., D.C.	54,649	26,298	1362	142
HUMAN ENG. LABS., ABERDEEN PROVING GROUND, MD.	3,336	2,944	53	53
INFANTRY BOARD, FT. BENNING, GA.	2,836	8,948	188	51
INST. OF DENTAL RSCH, WALTER REED AMC, WASH., D.C.	1,122	8,225	157	25
INST. OF SURGICAL RSCH, BROOKE AMC, FT SAM HOUSTON, TEX.	2,576	1,588	116	73
LAND WARFARE LAB, ABERDEEN P.G., MD.	7,164	6,383	18	124
LETTERMAN ARMY INST. OF RSCH, PRESIDIO OF SAN FRAN, CAL.	8,368	8,666	65	15
MATERIALS AND MECHANICS RSCH CENTER WATERTOWN, MASS.	22,812	9,717	12	618
MATERIALS BIOMECHANICAL RES. LAB., W. REED AMC, WASH CC	8,758	8,637	17	38
MEDICAL EQUIP. R+D LAB., FT. TOTTEN, FLUSHING, N.Y.	8,791	8,638	15	39
MED. RSCH OF INFECTIOUS DISEASES, FT. DETRICK, MD.	5,577	3,584	144	96
MED. RES. AND NUTR. LAB., FITZSIMONS GH, DENVER, COLO.	3,416	2,276	113	98
MEDICAL RES. LAB. FT. KNOX, KY.	3,167	1,854	97	118
MEDIC. RESEARCH UNIT, BALBOA HEIGHTS, CANAL ZONE	8,241	8,281	9	8
MEDICAL RES. UNIT, KUALA LUMPUR, MALAYSIA	8,241	8,163	6	5
MISSILE COMMAND R+D LABS., REDSTONE ARSENA, ALA.	78,738	41,991	68	1867
MOBILITY EQUIP. RES. AND DEVELOP. CENTER, FT BELVOIR, NATICK LABS., NATICK, MASS	52,768	33,761	54	1366
NIGHT VISION LABORATORY, FORT BELVOIR, VA.	28,622	23,511	150	1242
PICATINNY ARSENAL LABS., DOVER, N.J.	38,898	16,542	38	423
RES. INST. OF ENVIRONMENTAL MEDICINE, NATICK, MASS.	118,888	56,215	68	2575
ROCK ISLAND ARSENAL LABS., ROCK ISLAND, ILL.	3,239	2,563	24	184
RSCH-DEVELOPMENT TECH SUPPORT ACTIVITY FT. MONMOUTH NJ	22,195	15,394	15	787
TANK-AUTOMOTIVE COMMAND LABS., WARREN, MICH.	11,384	11,884	69	595
TROPIC TEST CENTER, FT. CLAYTON, CANAL ZONE	43,581	18,362	19	978
WALTER REED ARMY INST. OF RES., WASH., D.C.	4,885	2,588	124	91
WATERLIET ARSENAL LABS., WATERLIET, N.Y.	17,824	11,387	481	732
WHITE SANDS MISSILE RANGE, WHITE SANDS, N.M.	16,192	6,737	4	452
YUMA PROVING GROUND, YUMA, ARIZ	187,937	88,896	1330	3648
	25,357	9,437	461	761
TOTALS	1878,852	788,337	8817	29195
		785,284	488	1685
		541,236	3855	11866

\*

TABLE 2. ARMY RDT+E FACILITIES DATA, FY 1971

INSTALLATION	ACRES		SPACE (THOUSANDS OF SQUARE FEET)		COST (MILLIONS \$)	
	#	%	LABORATORY	ADMIN	REAL PROPERTY	EQUIPMENT
AEROMEDICAL RESEARCH LAB., FT. RUCKER, ALA.			21.495	5.942	0.203	1.340
AIRBORNE, ELECTR. AND SPECIAL WARFARE BD., FT BRAGG NC			0.000	0.000	0.000	2.925
AIR DEFENSE BOARD, FT. BLISS, TEX.			36.558	36.646	2.196	11.055
AIR MOBILITY RSCH AND DEVEL LAB. MOFFETT FIELD, CALIF	128	24	85.014	63.349	1.474	5.446
ARCTIC TEST CENTER, FT. GREELY, ALASKA	72.234	13.5	34.288	34.237	34.962	7.349
ARMOR AND ENGINEER BOARD, FT. KNOX, KY	6572	0.4	60.000	258.344	8.340	2.350
ARMY MATERIAL SYST AND ANAL AGENCY, ABERDEEN P.G., MD.			41.981	18.731	1.272	0.000
ARTILLERY BOARD, FT. SILL, OKLA.	238	4	4.254	79.278	0.240	0.000
ATMOSPHERIC SCIENCE LAB. WHITE SANDS, NEW MEXICO	45	0	0.000	0.000	48.974	0.000
AVIATION TEST ACTIVITY, EDWARDS AFB, CAL.	9	0	4.288	32.838	1.109	3.027
AVIATION TEST BOARD, FT. RUCKER, ALA.	2149	9	3.018	19.198	2.054	16.411
AVIONICS LABORATORY, FORT MONMOUTH, N.J.	25	0	67.149	4.378	2.684	11.980
BALLISTIC RES. LABS., ABERDEEN PROVING GROUND, MD.	3469	0	298.232	74.558	12.786	19.582
BEHAVIORAL SCIENCE RES. LAB., WASH., D.C.	8	0	25.816	4.367	0.000	1.905
BIOLOGICAL LABS., FT. DETRICK, MD.	1228	0	1223.267	181.878	72.562	18.423
COATING AND CHEMICAL LAB., ABERDEEN PROVING GROUND, MD	1	0	16.385	1.868	0.642	0.642
COLD REGIONS RSCH + ENGR LAB, HANOVER, N. H.	631	0	19.013	9.848	3.986	4.133
COMBAT SURVEILLANCE GROUP, FT. MONMOUTH, N.J.	71	0	95.674	7.281	2.418	15.773
COMMUNICATIONS + ADP LAB, FORT MONMOUTH, N.J.	12	0	75.385	7.389	0.000	6.987
CONSTRUCTION ENGR. RESEARCH LAB., URBANA, ILL.	15	0	68.875	32.075	3.681	1.795
DESERT TEST CENTER(LABS) DUGWAY, UTAH	246302	0	280.463	139.594	68.969	19.486
DEVELOPMENT AND PROOF SERVICES, APG, MD.	68728	0	84.400	78.800	47.000	31.000
EDGEWOOD ARSENAL LABS., EDGEWOOD ARSENAL, MD	4255	0	679.877	122.839	15.548	10.500
ELECTRONIC PROVING GROUND, FT. HUACHUCA, ARIZ	9231	0	0.000	174.526	4.989	34.100
ELECTRONIC TECHNOLOGY + DEVICES LAB, FT MONMOUTH, N.J.	247	0	163.096	4.000	5.432	11.412
ELECTRONIC WARFARE LAB, FT MONMOUTH, N.J.	8	0	31.576	57.058	1.240	34.165
ENGINEER TOPOGRAPHIC LAB., FT BELVOIR, VA.	8	0	47.384	9.980	0.000	9.358
ENGINEER WATERWAYS EXPERIMENT STA., VICKSBURG, MISS.	1884	0	1375.000	383.534	0.000	22.531
FRANKFORD ARSENAL LABS., PHILA., PA.	22	0	558.000	134.000	0.000	9.870
GENERAL EQUIPMENT TEST ACTIVITY, FT. LEE, VA.	453	0	68.589	21.625	1.560	2.314
HARRY DIAMOND LABS., WASH., D.C.	2778	0	281.602	46.119	11.876	22.871
HUMAN ENG. LABS., ABERDEEN PROVING GROUND, MD.	10	0	26.500	17.685	1.513	3.210
INFANTRY BOARD, FT. BENNING, GA.	8	0	0.000	47.343	0.552	0.308
INST. OF DENTAL RSCH, WALTER REED AMC, WASH., D.C.	8	0	7.111	4.122	0.000	0.675
INST. OF SURGICAL RSCH, BROOKE AMC, FT SAM HOUSTON, TEX.	1	0	10.424	0.000	1.000	0.000
LAND WARFARE LAB, ABERDEEN P.G., MD.	80	0	36.311	2.655	0.687	0.696
LETTERMAN ARMY INST. OF RSCH, PRESIDIO OF SAN FRANCISCO, CAL.	8	0	68.102	8.900	0.000	2.552
MATERIALS AND MECHANICS RSCH CENTER WATERTOWN, MASS.	48	0	416.100	122.400	14.212	13.200
MEDICAL BIOMECHANICAL RES. LAB., W. REED AMC, WASH DC	8	0	11.463	1.022	0.930	0.380
MEDICAL EQUIP. RUO LAB., FT. TOTTEN, FLUSHING, N.Y.	8	0	7.064	3.577	0.556	0.466
MED. RSCH OF INFECTIOUS DISEASES, FT. DETRICK, MD.	6	0	71.728	105.994	0.284	1.823
MED. RES. AND NUTR. LAB., FITZSIMONS GH, DENVER, COLO.	6	0	83.663	5.138	4.791	3.938
MEDICAL RES. LAB. FT. KNOX, KY.	10	0	86.786	5.368	0.938	3.402
MEDICAL RESEARCH UNIT, BALBOA HEIGHTS, CANAL ZONE	6	0	5.078	0.000	0.000	0.000
MILITARY RES. UNIT, KUALA LUMPUR, MALAYSIA	8	0	7.000	0.000	0.000	0.222
MISSILE COMMAND R&D LABS., REDSTONE ARSENAL, ALA.	11208	0	898.760	140.686	25.023	25.891
MOBILITY EQUIP. RES. AND DEVELOP. CENTER, FT BELVOIR, MATTICK LABS., MATTICK, MASS	3287	0	285.697	217.336	23.197	29.602
MIGHT VISION LABORATORY, FORT BELVOIR, VA.	6495	0	525.000	65.900	39.824	12.458
PICATINNY ARSENAL LABS., DOVER, N.J.	6495	0	73.625	29.083	4.295	36.200
RES. INST. OF ENVIRONMENTAL MEDICINE, MATTICK, MASS.	8	0	668.245	2580.998	72.150	50.500
ROCK ISLAND ARSENAL LABS., ROCK ISLAND, ILL	19	0	76.157	12.356	6.982	1.952
RSCH-DEVELOPMENT TECH SUPPORT ACTIVITY, FT. MONMOUTH NJ	136	0	95.600	91.020	1.466	10.259
TANK-AUTOMOTIVE COMMAND LABS., WARREN, MICH.	1125	0	71.300	0.000	6.701	6.940
TROPIC TEST CENTER, FT. CLAYTON, CANAL ZONE	37218	0	315.900	0.000	13.183	16.273
WALTER REED ARMY INST. OF RES., WASH., D.C.	1172	0	86.216	59.294	3.160	12.228
WATERLIET ARSENAL LABS., WATERLIET, N.Y.	4	0	393.200	57.500	0.000	0.000
WHITE SANDS MISSILE RANGE, WHITE SANDS, N.M.	3622273	0	216.559	323.250	2.365	3.436
YUMA PROVING GROUND, YUMA, ARIZ	1043463	0	1421.093	2807.128	163.286	137.066
			166.267	72.300	05.295	54.081
TOTALS	5401655		11438.201	3956.082	859.115	800.203

TABLE 3. NAVY ROT+E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1971

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA											
	TOTAL IN-HOUSE		TOTAL RDT+E		TOTAL IN-HOUSE		TOTAL RDT+E		PHD MIL		PHD CIV		PROF MIL		PROF CIV	
	TOTAL	IN-HOUSE	TOTAL	RDT+E	TOTAL	RDT+E	TOTAL	RDT+E	TOTAL	MIL	TOTAL	CIV	TOTAL	MIL	TOTAL	CIV
NAVAL AEROSPACE MEDICAL RESEARCH LAB, PENSACOLA, FLA.	4,888	4,888	3,579	3,579	26	114	12	16	17	17	46	46	17	17	46	46
NAVAL AEROSPACE RECOVERY FACILITY, EL CENTRO, CALIF.	4,835	4,835	2,428	2,428	167	189	1	8	16	16	23	23	16	16	23	23
NAVAL AIR DEVELOPMENT CENTER, JOHNSVILLE, PA.	93,126	57,411	61,269	36,316	427	2496	13	28	78	78	1849	1849	78	78	1849	1849
NAVAL AIR ENGINEERING CENTER, PHILADELPHIA, PA.	77,881	37,545	8,885	5,463	48	2184	8	7	12	12	301	301	12	12	301	301
NAVAL AIR TEST CENTER, PATUXENT RIVER, MD.	73,335	66,536	27,514	24,851	1293	2891	1	3	198	198	394	394	198	198	394	394
NAVAL AIR TEST FACILITY, LAKEHURST, N. J.	9,717	8,838	1,826	0,968	155	414	0	0	8	8	75	75	8	8	75	75
NAVAL AIR PROPULSION TEST CENTER, TRENTON, N. J.	14,917	12,836	0,721	7,581	18	694	0	0	7	7	162	162	7	7	162	162
NAVAL BLOOD RESEARCH LAB., N. H.; CHELSEA, MASS.	8,428	8,428	0,285	0,285	9	13	3	1	4	4	2	2	4	4	2	2
NAVAL CIVIL ENGINEERING LABORATORY, PORT HUENFRE, CAL.	11,593	9,547	5,773	4,439	15	398	1	31	7	7	198	198	7	7	198	198
NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.	1,217	1,217	0,613	0,613	1	66	0	0	1	1	24	24	1	1	24	24
NAVAL DENTAL RESEARCH INST., NTC, GREAT LAKES, ILL.	8,491	8,491	0,287	0,287	18	12	8	2	12	12	7	7	12	12	7	7
NAVAL ELECTRONICS LABORATORY CENTER, SAN DIEGO, CALIF.	56,275	52,852	37,668	34,653	118	1455	2	54	98	98	768	768	98	98	768	768
NAVY ELECTRONIC SYST. TEST+EVAL. FAC, PATUXENT RIVER, MD.	7,863	7,863	1,788	1,788	32	156	0	0	6	6	71	71	6	6	71	71
NAVAL ENVIRON PREDICTION RSCH. FACILITY MONTEREY, CAL.	8,888	8,888	0,888	0,888	4	20	1	0	3	3	8	8	3	3	8	8
NAVAL EXPL. ORD. DISPOSAL FAC., INDIAN HEAD, MD.	3,177	2,287	0,927	0,788	45	132	0	0	3	3	15	15	3	3	15	15
NAVAL MEDICAL FIELD RESEARCH LAB., CAMP LEJEUNE, N.C.	1,884	1,884	0,788	0,788	29	52	7	3	9	9	12	12	9	9	12	12
NAVAL MEDICAL RESEARCH INST., NMC, BETHESDA	6,748	6,748	4,767	4,767	173	235	42	38	98	98	79	79	98	98	79	79
NAVAL MEDICAL RESEARCH UNIT NO.1, BERKELEY, CALIF.	8,269	8,269	0,289	0,289	16	3	3	4	7	7	1	1	7	7	1	1
NAVAL MEDICAL RESEARCH UNIT NO.2, TAIPEI, TAIWAN	1,976	1,976	1,376	1,376	36	10	11	2	16	16	3	3	16	16	3	3
NAVAL MEDICAL RESEARCH UNIT NO.3, CAIRO, EGYPT	1,438	1,438	1,078	1,078	38	111	7	15	9	9	44	44	9	9	44	44
NAVAL MEDICAL RESEARCH UNIT NO.4, GREAT LAKES, ILL.	1,251	1,251	0,797	0,797	34	45	6	2	12	12	14	14	12	12	14	14
NAVY MED. NEUROPSYCHIATRIC RES. UNIT, SAN DIEGO, CAL.	1,129	1,129	0,898	0,898	12	52	9	8	10	10	21	21	10	10	21	21
NAVAL MISSILE CENTER, POINT MUGU, CALIF.	57,984	44,726	22,823	16,878	784	1698	6	7	183	183	468	468	183	183	468	468
PACIFIC MISSILE RANGE, WHITE OAK, MD.	88,686	54,168	63,569	43,337	865	3858	6	7	183	183	468	468	183	183	468	468
NAVAL ORDNANCE LABORATORY, WHITE OAK, MD.	76,957	57,295	51,384	34,988	52	2847	1	121	28	28	1187	1187	28	28	1187	1187
NAVAL ORDNANCE TEST FAC., WHITE SANDS, N. MEX.	4,836	3,681	1,785	1,689	185	86	2	1	21	21	4	4	21	21	4	4
NAVAL PERSONNEL RESEARCH ACTIVITY, SAN DIEGO, CALIF.	3,777	3,777	3,284	3,284	35	163	0	38	35	35	99	99	35	35	99	99
NAVAL PERSONNEL RSCH AND DEVELOPMENT LAB, WASH., D. C.	3,888	3,888	2,529	2,529	43	238	0	0	43	43	158	158	43	43	158	158
NAVAL RESEARCH LABORATORY, WASHINGTON, D.C.	112,291	186,838	96,161	98,788	88	3785	3	376	11	11	1456	1456	11	11	1456	1456
NAVAL SHIP RESEARCH AND DEVELOPMENT CTR., WASH., D.C.	116,971	78,338	87,789	58,181	177	3581	6	113	48	48	1449	1449	48	48	1449	1449
NAVY SPACE SYSTEMS ACTIVITY, LOS ANGELES, CALIF.	7,953	8,858	6,845	8,638	28	38	1	1	24	24	28	28	24	24	28	28
NAVY SUBMARINE MED. RSCH LAB, NEW LONDON, GROTON, CONN	1,447	1,447	1,168	1,168	25	55	8	11	14	14	38	38	14	14	38	38
NAVY TOXICOLOGY UNIT, NMC, BETHESDA, MD.	8,248	8,248	8,128	8,128	15	8	0	0	5	5	3	3	5	5	3	3
NAVAL TRAINING DEVICES CENTER, ORLANDO, FLA.	72,256	23,898	13,564	11,561	58	1128	1	18	39	39	283	283	39	39	283	283
NAVAL UNDERSEA R+D CENTER, SAN DIEGO, CALIF.	79,669	53,255	48,881	27,311	384	1621	0	85	33	33	652	652	33	33	652	652
NAVAL UNDERWATER SYSTEMS CENTER, NEWPORT, R.I.	97,521	59,631	39,288	26,372	189	2936	0	68	24	24	1313	1313	24	24	1313	1313
NAVAL UNIT, FORT DETRICK, FREDERICK, MD.	8,161	8,161	8,836	8,836	13	1	1	0	4	4	8	8	4	4	8	8
NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.	151,514	91,556	83,485	52,246	729	4388	0	189	53	53	1358	1358	53	53	1358	1358
NAVAL WEAPONS EVALUATION FACILITY, ALBUQUERQUE, N.MEX	4,543	4,526	1,338	1,321	218	98	0	1	68	68	51	51	68	68	51	51
NAVAL WEAPONS LABORATORY, DAHLGREN, VA.	71,288	54,582	28,263	22,933	188	2783	1	68	25	25	958	958	25	25	958	958
TOTALS	1313,472	928,346	711,924	527,418	6448	39118	161	1282	1368	1368	1326	1326	1368	1368	1326	1326

TABLE 4. NAVY ROT+E FACILITIES DATA, FY 1971

INSTALLATION	ACRES	SPACE (THOUSANDS OF SQUARE FEET)			SPACE AND PROPERTY		REAL PROPERTY EQUIPMENT		TOTAL
		LABORATORY	ADMIN	OTHER	LABORATORY	ADMIN	LABORATORY	ADMIN	
NAVAL AEROSPACE MEDICAL RESEARCH LAB, PENSACOLA, FLA.	0	96.787	9.684	14.893	0.000	0.000	0.000	1.654	0.000
NAVAL AEROSPACE RECOVERY FACILITY, EL CENTRO, CALIF.	181292	44.000	18.000	263.000	8.598	0.000	0.000	2.400	8.598
NAVAL AIR DEVELOPMENT CENTER, JOHNSVILLE, PA.	758	893.839	55.671	413.524	22.163	0.000	0.000	37.897	22.163
NAVAL AIR ENGINEERING CENTER, PHILADELPHIA, PA.	568	1373.426	177.625	723.289	33.546	0.000	0.000	18.244	33.546
NAVAL AIR TEST CENTER, PATUXENT RIVER, MD.	6861	741.822	186.864	3994.351	114.873	0.000	0.000	48.634	114.873
NAVAL AIR TEST FACILITY, LAKEHURST, N. J.	2582	59.284	38.498	91.986	32.681	0.000	0.000	7.132	32.681
NAVAL AIR PROPULSION TEST CENTER, TRENTON, N. J.	66	418.988	51.888	135.822	44.293	0.000	0.000	13.191	44.293
NAVAL BLOOD RESEARCH LAB., N. H., CHELSEA, MASS.	1	6.263	0.161	1.000	0.115	0.000	0.000	0.429	0.115
NAVAL CIVIL ENGINEERING LABORATORY, PORT HUENEME, CAL.	22	120.352	21.977	31.548	5.118	0.000	0.000	3.064	5.118
NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.	2	18.000	7.000	3.000	0.275	0.000	0.000	0.500	0.275
NAVAL DENTAL RESEARCH INST., NTC, GREAT LAKES, ILL	0	6.997	0.897	0.664	0.800	0.000	0.000	0.319	0.800
NAVAL ELECTRONICS LABORATORY CENTER, SAN DIEGO, CALIF.	1987	457.811	152.725	225.383	11.898	0.000	0.000	33.971	11.898
NAVY ELECTRONIC SYST. TEST EVAL. FAC, PATUXENT RIVER, MD.	852	22.944	2.582	14.195	3.342	0.000	0.000	4.518	3.342
NAVAL ENVIRON PREDICTION RSCH. FACILITY MONTEREY, CAL.	0	0.000	0.843	6.351	0.000	0.000	0.000	0.878	0.843
NAVAL EXPL. ORD. DISPOSAL FAC., INDIAN HEAD, MD.	1884	33.151	17.287	78.551	4.787	0.000	0.000	1.855	4.787
NAVAL MEDICAL FIELD RESEARCH LAB., CAMP LEJEUNE, N. C.	3	28.226	8.655	15.590	0.490	0.000	0.000	0.600	0.490
NAVAL MEDICAL RESEARCH INSTITUTE, NMMC, BETHESDA	4	151.738	21.561	26.590	3.993	0.000	0.000	0.542	3.993
NAVAL MEDICAL RESEARCH UNIT NO.1, BERKELEY, CALIF.	2	0.000	0.000	0.000	0.000	0.000	0.000	0.296	0.000
NAVAL MEDICAL RESEARCH UNIT NO.2, TAIPEI, TAIWAN	2	65.332	21.800	0.000	0.000	0.000	0.000	0.781	0.000
NAVAL MEDICAL RESEARCH UNIT NO.3, CAIRO, EGYPT	5	43.428	6.618	16.437	0.686	0.000	0.000	0.000	0.686
NAVAL MEDICAL RESEARCH UNIT NO.4, GREAT LAKES, ILL	1	28.782	11.576	13.649	0.327	0.000	0.000	0.397	0.327
NAVY MED. NEUROPSYCHIATRIC RES. UNIT, SAN DIEGO, CAL.	2	11.177	4.588	0.000	0.000	0.000	0.000	0.221	0.000
NAVAL MISSILE CENTER, POINT MUGU, CALIF.	4	118.756	168.569	698.391	22.824	0.000	0.000	36.858	22.824
PACIFIC MISSILE RANGE, POINT MUGU, CALIF.	29688	93.463	271.479	1398.796	138.888	0.000	0.000	162.788	138.888
NAVAL ORDNANCE LABORATORY, WHITE OAK, MD.	1859	311.167	182.543	1819.418	46.287	0.000	0.000	32.595	46.287
NAVAL ORDNANCE LAB., WHITE SANDS, N. MEX.	112	84.742	38.719	236.239	6.598	0.000	0.000	3.312	6.598
NAVAL PERSONNEL RESEARCH ACTIVITY, SAN DIEGO, CALIF.	1	47.388	4.988	0.000	0.218	0.000	0.000	0.277	0.218
NAVAL PERSONNEL RSCH AND DEVELOPMENT LAB, WASH., D. C.	0	22.156	2.783	1.428	0.652	0.000	0.000	0.400	0.652
NAVAL RESEARCH LABORATORY, WASHINGTON, D. C.	2849	1544.718	182.791	645.856	76.187	0.000	0.000	58.124	76.187
NAVAL SHIP RESEARCH AND DEVELOPMENT CTR., WASH., D.C.	975	559.918	283.886	1779.348	79.474	0.000	0.000	49.842	79.474
NAVY SPACE SYSTEMS ACTIVITY, LOS ANGELES, CALIF.	0	0.000	6.888	0.888	0.888	0.000	0.000	0.825	0.888
NAVAL SUBMARINE MED. RSCH LAB, NEW LONDON, GROTON, CT	0	27.168	18.382	18.279	0.888	0.000	0.000	1.259	0.888
NAVY TOXICOLOGY UNIT, NMMC, BETHESDA, MD.	0	2.268	0.148	1.416	0.187	0.000	0.000	0.438	0.187
NAVAL TRAINING DEVICES CENTER, ORLANDO, FLA.	68	93.588	281.356	123.346	2.858	0.000	0.000	4.481	2.858
NAVAL UNDERSEA R+O CENTER, SAN DIEGO, CALIF.	37615	331.944	33.457	666.654	36.783	0.000	0.000	44.548	36.783
NAVAL UNDERWATER SYSTEMS CENTER, NEWPORT, R.I.	338	488.273	288.987	581.282	28.158	0.000	0.000	19.859	28.158
NAVAL UNIT, FORT DETRICK, FREDERICK, MD.	2	0.888	2.825	0.888	0.888	0.000	0.000	0.888	0.888
NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.	1892928	1310.547	169.566	5895.288	227.687	0.000	0.000	82.899	227.687
NAVAL WEAPONS EVALUATION FACILITY, ALBUQUERQUE, N. MEX	4	17.942	17.942	91.114	6.888	0.000	0.000	8.489	6.888
NAVAL WEAPONS LABORATORY, DAHLGREN, VA.	4498	541.641	76.842	933.132	64.979	0.000	0.000	38.977	64.979
TOTALS	1285217	18182.847	2556.763	18452.835	1823.953	0.000	0.000	696.829	1823.953

TABLE 5. AIR FORCE RDT+E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1971

INSTALLATION	FUNDING DATA (MILLIONS \$)			PERSONNEL DATA					
	TOTAL	IN-HOUSE	TOTAL RDT+E	TOTAL MIL	PHO MIL	PHO CIV	PROF MIL	PROF CIV	
AEROPROPULSION LAB., WPAFB, OHIO	52.638	4.392	52.638	58	3	5	51	8	
AEROSPACE MEDICAL LAB. (CLINICAL), LACKLAND AFB, TEX	0.392	0.392	0.130	28	2	0	71	99	
6578 AEROSPACE MEDICAL RES. LAB., WPAFB, OHIO	12.414	6.172	10.935	133	23	28	55	117	
AEROSPACE RESEARCH LABORATORIES, WPAFB, OHIO	13.591	9.815	12.581	79	12	58	429	610	
AEROSPACE RESEARCH LABORATORIES, ELGIN AFB, FLA.	329.678	99.598	185.651	4965	15	21	67	47	
ARMAMENT DEVELOP. + TEST CENTER, TENN.	56.211	1.311	51.437	183	3	3	67	291	
ARNOLD ENGINEERING DEVELOPMENT CENTER, MASS.	92.154	9.835	90.818	91	7	11	90	612	
AVIONICS LAB., WPAFB, OHIO	59.878	33.818	56.292	179	10	150	482	220	
CAMBRIDGE RESEARCH LABS., L.G. HANSCOM FLD., MASS.	205.608	45.715	154.856	1726	44	1	97	419	
EASTERN TEST RANGE, PATRICK AFB, FLA.	61.946	19.748	60.668	3121	15	29	647	198	
FLIGHT DYNAMICS LAB., WPAFB, OHIO	68.856	59.248	41.498	3121	62	0	647	198	
FLIGHT TEST CENTER, EDWARDS AFB, CALIF.	1.681	1.681	0.635	25	13	1	18	82	
FRANK J. SEILER RESEARCH LAB., ACADEMY, COLO.	10.333	3.882	9.355	134	207	27	72	252	
HUMAN RESOURCES LAB., BROOKS AFB, TEX.	54.352	5.984	37.752	57	357	13	47	66	
MATERIALS LAB., WPAFB, OHIO	28.787	12.564	26.487	267	384	15	167	113	
ROCKET PROPULSION LAB., EDWARDS AFB, CALIF.	151.467	32.882	81.733	324	1177	1	184	610	
ROME AIR DEVELOPMENT CENTER, GRIFFIS AFB, N.Y.	80.880	37.358	73.680	585	494	0	249	195	
SPACE + MISSILE TEST CENTER, VANDERBURG AFB, CALIF.	18.893	15.921	11.221	683	406	93	41	206	
USAF SCHOOL OF AEROSPACE MED., BROOKS AFB, TEX.	76.216	35.221	67.226	888	454	84	595	281	
WEAPONS LAB., KIRTLAND AFB, N.M.									
TOTALS	1388.135	429.743	945.513	13414	13574	428	468	3563	
			293.296					4415	

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TABLE 6. AIR FORCE ROT+E FACILITIES DATA, FY 1971

INSTALLATION	SPACE AND PROPERTY			COST (MILLIONS \$)	
	ACRES	SPACE (THOUSANDS OF SQUARE FEET) LABORATORY ADMIN OTHER	REAL PROPERTY EQUIPMENT	PROPERTY	EQUIPMENT
AEROPROPULSION LAB., WPAFB, OHIO	40	309.500	56.500	12.894	16.713
AEROSPACE MEDICAL LAB. (CLINICAL), LACKLAND AFB, TEX	1	7.587	1.467	0.140	0.849
6570 AEROSPACE MEDICAL RES. LAB., WPAFB, OHIO	30	211.900	10.000	11.570	15.484
AEROSPACE RESEARCH LABORATORIES, WPAFB, OHIO	50	134.207	28.512	10.543	11.861
ARMAMENT DEVELOP. + TEST CENTER, ELGIN AFB, FLA.	464741	682.324	846.537	195.803	248.455
ARNOLD ENGINEERING DEVELOPMENT CENTER, TENN.	40117	1138.678	201.411	355.856	56.219
AVIONICS LAB., WPAFB, OHIO	265	224.287	5.304	20.872	34.478
× CAMBRIDGE RESEARCH LABS., L.G. HANSCOM FLD., MASS.	947	611.201	19.708	20.500	68.268
EASTERN TEST RANGE, PATRICK AFB, FLA.	18222	133.860	385.767	22.053	648.499
FLIGHT DYNAMICS LAB., WPAFB, OHIO	90	537.300	56.600	22.900	52.750
FLIGHT TEST CENTER, EDWARDS AFB, CALIF.	300723	939.933	406.022	210.705	423.445
FRANK J. SEILER RESEARCH LAB., ACADEMY, COLO.	0	5.394	2.860	1.270	1.466
HUMAN RESOURCES LAB., BROOKS AFB, TEX.	13	63.830	24.390	1.857	3.976
MATERIALS LAB., WPAFB, OHIO	9	0.213	0.022	6.600	9.600
ROCKET PROPULSION LAB., EDWARDS AFB, CALIF.	56400	419.046	99.248	29.572	25.653
ROME AIR DEVELOPMENT CENTER, GRIFFIS AFB, N.Y.	2784	741.466	112.793	24.958	91.264
SPACE + MISSILE TEST CENTER, VANDENBURG AFB, CALIF.	45526	91.407	354.384	298.980	505.933
USAF SCHOOL OF AEROSPACE MED., BROOKS AFB, TEX.	93	442.830	93.330	15.281	20.621
WEAPONS LAB., KIRTLAND AFB, N.M.	1174	432.547	14.620	9.913	32.340
TOTALS	929225	7129.510	2729.475	1626.260	2259.874

TABLE 7. DOD RDT&E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1971

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA							
	TOTAL	IN-HOUSE	TOTAL	IN-HOUSE	TOTAL	MIL		PHD		PROF		CIV
						RT&E	RD+E	MIL	CIV	MIL	CIV	
ARMED FORCES RADIOBIOLOGY RES. INSTITUTE BETHESDA, MD	3.719	3.719	2.985	2.985	67	147	17	13	38	39		
TOTALS	3.719	3.719	2.985	2.985	67	147	17	13	38	39		

TABLE 7A. DOD RDT&E FACILITIES DATA, FY 1971

INSTALLATION	SPACE AND PROPERTY			COST (MILLIONS \$)	
	ACRES	SPACE (THOUSANDS OF SQUARE FEET)	LABORATORY ADMIN	REAL PROPERTY EQUIPMENT	
				LABORATORY	ADMIN
ARMED FORCES RADIOBIOLOGY RES. INSTITUTE BETHESDA, MD	12	24,668	14,986	6.135	2.551
TOTALS	12	24,668	14,986	6.135	2.551

SUMMARY

DEPARTMENT OF DEFENSE R+D LABORATORIES

PROGRAM DATA FOR FY 1971 (ACTUAL)

	(MILLIONS \$)
TOTAL ANNUAL LABORATORY PROGRAM	2493.844
TOTAL INHOUSE PROGRAM	1438.767
TOTAL RDT+E PROGRAM	1694.367
TOTAL INHOUSE RDT+E	967.616
TOTAL ANNUAL OPERATING COST	351.805

PERSONNEL DATA (END OF FY 1971)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD	TOTAL PROFESSIONALS
MILITARY	8160	815	3891
CIVILIAN	56986	2557	24240
TOTAL	65146	3372	28131

PHYSICAL FACILITIES (END OF FY 1971)

ACRES.....	1241343
SPACE (THOUSANDS OF SQ FT)	
LABORATORY.....	21530.634
ADMINISTRATIVE.....	4765.714
OTHER.....	19615.388
TOTAL.....	45911.735
COST (MILLIONS \$)	
REAL PROPERTY.....	1241.491
EQUIPMENT.....	1248.563
TOTAL.....	2490.054

TABLE 1A. ARMY R+D LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1971

INSTALLATION	FUNDING DATA (MILLIONS \$)			PERSONNEL DATA											
	TOTAL	TOTAL IN-HOUSE	TOTAL RDT+E	TOTAL	IN-HOUSE	TOTAL	CIV	MIL	PHD	PHD CIV	PHD MIL	PROF	PROF MIL	CIV	CIV
AEROMEDICAL RESEARCH LAB., FT. RUCKER, ALA.	1.550	1.550	1.029	1.029	1.029	48	23	17	1	1	1	43	2	2	2
AIR MOBILITY RSCH AND DEVEL LAB. MOFFETT FIELD, CALIF	37.089	24.113	37.026	24.050	24.050	55	551	1	19	33	33	230	230	230	230
ARMY MATERIAL SYST AND ANAL AGENCY, ABERDEEN P.G., MD.	13.856	8.261	12.041	7.179	7.179	13	314	0	0	13	13	238	238	238	238
ATMOSPHERIC SCIENCE LAB. WHITE SANDS, NEW MEXICO	12.795	10.716	10.023	7.940	7.940	516	253	0	10	12	12	114	114	114	114
AVIONICS LABORATORY, FORT MONMOUTH, N.J.	14.285	11.013	11.249	8.118	8.118	30	209	1	4	29	29	144	144	144	144
BALLISTIC RES. LABS., ABERDEEN PROVING GROUND, MD.	24.985	19.309	24.379	18.718	18.718	76	724	12	73	73	73	403	403	403	403
BEHAVIORAL SCIENCE RES. LAB., WASH., D.C.	2.721	1.951	2.721	1.951	1.951	4	83	0	24	1	1	57	57	57	57
BIOLOGICAL LABS., FT. DETRICK, MD.	20.835	20.713	18.547	18.425	18.425	77	210	5	23	33	33	92	92	92	92
COATING AND CHEMICAL LAB., ABERDEEN PROVING GROUND, MD	2.827	1.412	2.591	1.215	1.215	5	44	1	2	6	6	24	24	24	24
COLD REGIONS RSCH + ENGR LAB, HANOVER, N. H.	6.266	5.393	5.502	4.695	4.695	41	218	4	21	61	61	80	80	80	80
COMBAT SURVEILLANCE GROUP, FT. MONMOUTH, NJ.	9.370	1.095	9.370	1.095	1.095	67	283	2	6	16	16	183	183	183	183
COMMUNICATIONS + ADP LAB. FORT MONMOUTH, N.J.	31.089	15.307	30.784	15.002	15.002	33	355	0	7	21	21	245	245	245	245
CONSTRUCTION ENGR. RESEARCH LAB., URBANA, ILL.	4.028	3.523	3.484	3.029	3.029	3	141	2	19	12	12	63	63	63	63
EDGEWOOD ARSENAL LABS., EDGEWOOD ARSENAL, MD.	41.944	37.490	29.504	25.050	25.050	208	452	9	52	14	14	303	303	303	303
ELECTRONIC TECHNOLOGY + DEVICES LAB, FT MONMOUTH, N.J.	25.903	14.000	25.733	13.838	13.838	17	452	9	52	14	14	303	303	303	303
ELECTRONIC WARFARE LAB. FT. MONMOUTH, N.J.	8.600	0.600	0.600	0.600	0.600	89	328	1	1	2	2	16	16	16	16
ENGINEER TOPOGRAPHIC LAB., FT BELVOIR, VA.	11.013	5.144	10.853	4.984	4.984	15	239	1	13	16	16	137	137	137	137
ENGINEER WATERWAYS EXPERIMENT STA., VICKSBURG, MISS.	19.511	18.722	10.919	10.130	10.130	36	1188	2	33	43	43	323	323	323	323
ENGINEER WATERWAYS EXPERIMENT STA., VICKSBURG, MISS.	29.203	21.307	25.150	17.254	17.254	18	1567	1	29	17	17	691	691	691	691
FRANKFORD ARS' AL LABS., PHILA., PA.	54.649	28.996	26.293	18.807	18.807	10	1362	1	42	11	11	481	481	481	481
HARRY DIAMOND LABS., WASH., D.C.	3.036	2.535	2.944	2.443	2.443	33	93	1	10	24	24	51	51	51	51
HUMAN ENG. LABS., ABERDEEN PROVING GROUND, MD.	1.122	1.122	0.525	0.525	0.525	57	25	3	1	48	48	24	24	24	24
INST.OF DENTAL RSCH, WALTER REED AMC, WASH., D.C.	2.576	2.576	1.302	1.300	1.300	116	75	22	3	42	42	21	21	21	21
INST.OF SURGICAL RSCH, BROOKE AMC, FT SAM HOUSTON, TEX.	7.164	4.563	6.303	3.898	3.898	18	124	0	3	15	15	57	57	57	57
LAND WARFARE LAB, ABERDEEN P.G., MD.	8.360	8.360	0.666	0.666	0.666	86	19	22	3	62	62	9	9	9	9
LETTERMAN ARMY INST.OF RSCH. PRESIDIO OF SAN FRAN,CAL.	22.812	9.717	12.847	7.886	7.886	12	610	6	61	12	12	214	214	214	214
MATERIALS AND MECHANICS RSCH CENTER WATERTOWN, MASS.	0.750	0.750	0.637	0.637	0.637	17	30	3	4	13	13	14	14	14	14
MEDICAL BIOMECHANICAL RES. LAB., W. REED AMC, WASH DC	0.791	0.791	0.630	0.630	0.630	15	39	0	0	8	8	8	8	8	8
MEDICAL EQUIP. R+D LAB., FT. TOTTEN, FLUSHING, N.Y.	5.577	4.560	3.904	2.887	2.887	344	96	38	12	76	76	46	46	46	46
MED.RSCH OF INFECTIOUS DISEASES, FT. DETRICK, MD.	3.416	3.416	2.276	2.276	2.276	113	98	30	12	76	76	46	46	46	46
MED. RES. AND NUTR. LAB., FITZSIMONS GH, DENVER, COLO.	3.167	3.167	1.854	1.854	1.854	97	110	14	16	70	70	31	31	31	31
MEDICAL RES. LAB. FT. KNOX, KY.	0.281	0.281	0.163	0.163	0.163	9	0	2	0	5	5	0	0	0	0
MEDICAL RESEARCH UNIT, BALBOA HEIGHTS, CANAL ZONE	0.241	0.241	0.182	0.182	0.182	6	0	5	0	7	7	0	0	0	0
MEDICAL RES. UNIT, KUALA LUMPUR, MALAYSIA	78.738	41.991	71.635	35.251	35.251	60	1067	2	49	75	75	652	652	652	652
MISSILE COMMAND R+D LABS., REDSTONE ARSENAL, ALA.	52.768	25.195	33.741	15.915	15.915	54	1306	1	9	44	44	390	390	390	390
MOBILITY EQUIP. RES. AND DEVELOP. CENTER, FT BELVOIR, VA.	28.622	23.511	16.056	12.585	12.585	150	1242	10	95	72	72	487	487	487	487
NATICK LABS., NATICK, MASS	32.090	16.542	30.090	16.542	16.542	30	423	0	33	15	15	220	220	220	220
NIGHT VISION LABORATORY, FORT BELVOIR, VA.	110.000	86.215	75.600	51.815	51.815	68	2575	2	62	59	59	1775	1775	1775	1775
PICATINNY ARSENAL LABS., DOVER, N.J.	3.239	3.239	2.503	2.503	2.503	84	104	24	21	61	61	50	50	50	50
RES. INST. OF ENVIRONMENTAL MEDICINE, NATICK, MASS.	22.195	14.216	15.394	8.416	8.416	15	787	1	36	13	13	320	320	320	320
ROCK ISLAND ARSENAL LABS., ROCK ISLAND, ILL	43.381	20.963	18.362	8.576	8.576	19	978	0	6	20	20	427	427	427	427
TANK-AUTOMOTIVE COMMAND LABS., WARREN, MICH.	17.824	17.824	11.387	11.387	11.387	401	732	165	56	296	296	347	347	347	347
WALTER REED ARMY INST. OF RES., WASH., D.C.	16.192	15.502	6.737	6.170	6.170	4	452	1	42	3	3	169	169	169	169
WATERVLIET ARSENAL LABS., WATERVLIET, N.Y.	826.869	557.915	613.530	397.616	397.616	3169	20850	466	976	1690	1690	9856	9856	9856	9856
TOTALS															

TABLE 2A. ARMY R+D FACILITIES DATA, FY 1971

INSTALLATION	SPACE AND PROPERTY			COST (MILLIONS \$)	
	ACRES	SPACE (THOUSANDS OF SQUARE FEET)	LABORATORY ADMIN OTHER	REAL PROPERTY	EQUIPMENT
AEROMEDICAL RESEARCH LAB., FT. RUCKER, ALA.	0	21.495	5.940	0.203	1.340
AIR MOBILITY RSCH AND DEVEL LAB. MOFFETT FIELD, CALIF	100	85.014	43.308	1.474	5.446
ARMY MATERIAL SYST AND ANAL AGENCY, ABERDEEN P.G., MD.	4	41.964	10.491	1.923	4.815
ATMOSPHERIC SCIENCE LAB. WHITE SANDS, NEW MEXICO	45	0.050	0.025	48.000	25.000
AVIONICS LABORATORY, FORT MONMOUTH, N.J.	25	67.149	4.378	2.604	11.980
BALLISTIC RES. LABS., ABERDEEN PROVING GROUND, MD.	3469	298.232	74.558	12.785	19.582
BEHAVIORAL SCIENCE RES. LAB., WASH., D.C.	0	26.816	4.367	0.000	1.905
BIOLOGICAL LABS., FT. DETRICK, MD.	1220	1023.267	101.878	72.562	10.423
COATING AND CHEMICAL LAB., ABERDEEN PROVING GROUND, MD	1	16.385	1.868	0.501	0.642
COLD REGIONS RSCH + ENGR LAB, HANDOVER, N. H.	631	19.013	9.848	3.906	4.133
COMBAT SURVEILLANCE GROUP, FT. MONMOUTH, NJ.	71	95.870	7.281	2.418	15.773
COMMUNICATIONS + ADP LAB. FORT MONMOUTH, N.J.	12	75.305	7.389	0.000	6.987
CONSTRUCTION ENGR. RESEARCH LAB., URBANA, ILL.	15	68.875	32.075	3.481	1.795
EDGEWOOD ARSENAL LABS., EDGEWOOD ARSENAL, MD	4055	679.877	122.839	19.540	10.500
ELECTRONIC TECHNOLOGY + DEVICES LAB, FT MONMOUTH, N.J.	247	163.096	4.000	5.832	11.412
ELECTRONIC WARFARE LAB, FT MONMOUTH, N.J.	0	31.576	57.850	1.200	34.165
ENGINEER TOPOGRAPHIC LAB., FT BELVOIR, VA.	0	47.304	9.900	0.000	9.358
ENGINEER WATERWAYS EXPERIMENT STA., VICKSBURG, MISS.	1084	1379.000	383.554	14.761	22.531
FRANKFORD ARSENAL LABS., PHILA., PA.	22	559.000	134.000	0.970	9.025
HARRY DIAMOND LABS., WASH., D.C.	270	281.602	46.119	11.874	22.871
INST. OF DENTAL RSCH, WALTER REED AMC, WASH., D.C.	10	26.500	17.605	1.513	3.210
INST. OF SURGICAL RSCH. BROOKE AMC, FT SAM HOUSTON, TEX.	0	7.711	4.722	0.000	0.675
LAND WARFARE LAB, ABERDEEN P.G., MD.	1	18.424	0.000	1.868	0.868
LETTERMAN ARMY INST. OF RSCH. PRESIDIO OF SAN FRANCISCO.	0	39.311	2.655	0.687	0.696
MATERIALS AND MECHANICS RSCH CENTER WATERTOWN, MASS.	0	60.102	8.900	0.052	2.552
MEDICAL BIOMECHANICAL RES. LAB., W. REED AMC, WASH DC	40	410.100	122.400	14.212	13.200
MEDICAL EQUIP. R+D LAB., FT. TOTTEN, FLUSHING, N.Y.	0	11.463	1.022	0.930	0.300
MED. RSCH OF INFECTIOUS DISEASES, FT. DETRICK, MD.	0	7.864	3.577	0.556	0.466
MED. RES. AND NUTR. LAB., FITZSIMONS GH, DENVER, COLO.	0	71.728	13.238	8.284	1.823
MEDICAL RES. LAB. FT. KNOX, KY.	0	83.663	5.138	4.791	3.938
MEDICAL RESEARCH UNIT, BALBOA HEIGHTS, CANAL ZONE	19	86.786	5.368	0.938	3.402
MEDICAL RES. UNIT, KUALA LUMPUR, MALAYSIA	0	5.000	0.600	0.000	0.061
MISSILE COMMAND R+D LABS., REDSTONE ARSENAL, ALA.	1100	898.760	140.606	25.823	0.222
MOBILITY EQUIP. RES. AND DEVELP. CENTER, FT BELVOIR, NATICK LABS., NATICK, MASS	1060	285.697	217.336	23.197	29.602
NIGHT VISION LABORATORY, FORT BELVOIR, VA.	3087	525.000	65.900	39.024	12.458
PICATINNY ARSENAL LABS., DOVER, N.J.	0	73.625	29.883	4.295	36.200
RES. INST. OF ENVIRONMENTAL MEDICINE, NATICK, MASS.	6495	594.642	668.245	72.150	50.500
ROCK ISLAND ARSENAL LABS., ROCK ISLAND, ILL	0	72.157	12.356	6.902	1.952
TANK-AUTOMOTIVE COMMAND LABS., WARREN, MICH.	18	95.600	91.020	1.466	10.259
WALTER REED ARMY INST. OF RES., WASH., D.C.	1125	315.900	0.000	13.183	10.273
WATERVLIET ARSENAL LABS., WATERVLIET, N.Y.	1170	303.200	57.500	0.000	12.276
	4	216.559	23.250	2.365	3.436
TOTALS	30696	9274.689	2554.849	426.371	458.031
		6280.216			

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TABLE 3A. NAVY R+D LABORATORIES, PROGRAM ANC PERSONNEL DATA, FY 1971

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA											
	TOTAL		IN-HOUSE		TOTAL		IN-HOUSE		TOTAL		PHD		PHD		PROF	
	TOTAL	IN-HOUSE	TOTAL	RDT+E	TOTAL	RDT+E	TOTAL	RDT+E	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
NAVAL AEROSPACE MEDICAL RESEARCH LAB, PENSACOLA, FLA.	4.088	4.088	3.579	3.579	26	114	12	16	17	46						
NAVAL AIR DEVELOPMENT CENTER, JOHNSVILLE, PA.	93.126	57.411	61.269	36.316	427	2496	13	28	78	1049						
NAVAL AIR ENGINEERING CENTER, PHILADELPHIA, PA.	77.881	37.545	8.885	5.463	40	2184	0	7	12	361						
NAVAL BLOOD RESEARCH LAB., N. H., CHELSEA, MASS.	0.428	0.428	0.285	0.285	0	13	3	1	4	2						
NAVAL CIVIL ENGINEERING LABORATORY, PORT HUENEME, CAL.	11.993	9.547	5.773	4.439	15	390	1	31	7	190						
NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.	1.217	1.217	0.613	0.613	1	66	0	0	1	24						
NAVAL ELECTRONICS LABORATORY CENTER, SAN DIEGO, CALIF.	56.275	52.808	37.668	34.653	118	1455	3	54	98	700						
NAVAL ENVIRON. PREDICTION RSCH. FACILITY MONTEREY, CAL.	0.800	0.800	0.800	0.800	4	20	1	0	3	8						
NAVAL MEDICAL FIELD RESEARCH LAB., CAMP LEJEUNE, N.C.	1.004	1.004	0.767	0.767	29	52	7	3	9	12						
NAVAL MEDICAL RESEARCH INSTITUTE, NIMC, BETHESDA	6.748	6.748	4.767	4.767	173	235	42	30	40	79						
NAVAL MEDICAL RESEARCH UNIT NO. 1, BERKELEY, CALIF.	0.209	0.209	0.039	0.039	16	10	11	2	16	3						
NAVAL MEDICAL RESEARCH UNIT NO. 2, TAIPEI, TAIWAN	1.976	1.976	1.376	1.376	36	10	11	7	15	9						
NAVAL MEDICAL RESEARCH UNIT NO. 3, CAIRO, EGYPT	1.438	1.438	1.078	1.078	30	111	7	15	9	44						
NAVAL MEDICAL RESEARCH UNIT NO. 4, GREAT LAKES, ILL	1.251	1.251	0.797	0.797	34	45	6	2	12	14						
NAVY MED. NEUROPSYCHIATRIC RES. UNIT, SAN DIEGO, CAL.	1.129	1.125	0.890	0.890	10	52	9	8	10	21						
NAVAL ORDNANCE LABORATORY, WHITE OAK, MD.	76.957	57.295	51.384	34.988	52	2847	1	121	28	1107						
NAVAL PERSONNEL RESEARCH ACTIVITY, SAN DIEGO, CALIF.	3.777	3.777	3.204	3.204	35	163	0	30	35	99						
NAVAL PERSONNEL RSCH AND DEVELOPMENT LAB, WASH., D. C.	3.800	3.800	2.529	2.529	43	230	0	8	43	150						
NAVAL RESEARCH LABORATORY, WASHINGTON, D.C.	112.291	106.830	96.161	90.700	88	3705	3	376	11	1456						
NAVAL SHIP RESEARCH AND DEVELOPMENT CTR., WASH., D.C.	116.971	78.330	87.709	58.181	177	3581	6	113	40	1449						
NAVAL SUBMARINE MED. RSCH LAB, NEW LONDON, GROTON, CTNN	1.447	1.447	1.160	1.160	25	55	8	11	14	38						
NAVAL TRAINING DEVICES CENTER, ORLANDO, FLA.	72.256	23.898	13.564	11.561	50	1128	1	10	39	283						
NAVAL UNDERSEA R+D CENTER, SAN DIEGO, CALIF.	79.669	53.255	40.081	27.311	304	1621	0	85	33	652						
NAVAL UNDERWATER SYSTEMS CENTER, NEWPORT, R.I.	97.521	59.631	39.288	26.372	109	2936	0	60	24	1313						
NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.	151.514	51.556	83.405	52.246	729	4308	0	109	53	1358						
NAVAL WEAPONS LABORATORY, DAHLGREN, VA.	71.288	54.582	28.263	22.933	100	2703	1	60	25	958						
TOTALS	1045.286	710.304	573.667	426.180	2680	30523	138	1180	718	11417						

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TABLE 4A.

NAVY R+D FACILITIES DATA, FY 1971

INSTALLATION	ACRES	SPACE (THOUSANDS OF SQUARE FEET)			SPACE AND PROPERTY		COST (MILLIONS \$)	
		LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT	REAL PROPERTY	EQUIPMENT
NAVAL AEROSPACE MEDICAL RESEARCH LAB, PENSACOLA, FLA.	0	96.787	9.684	14.893	0.000	1.654	0.000	1.654
NAVAL AIR DEVELOPMENT CENTER, JOHNSVILLE, PA.	750	883.839	55.671	413.224	22.163	37.897	22.163	37.897
NAVAL AIR ENGINEERING CENTER, PHILADELPHIA, PA.	500	1373.426	177.625	723.209	33.546	18.244	33.546	18.244
NAVAL BLOOD RESEARCH LAB., N. H., CHELSEA, MASS.	1	6.263	0.161	1.000	0.115	0.429	0.115	0.429
NAVAL CIVIL ENGINEERING LABORATORY, PORT HUENEME, CAL.	22	120.352	21.977	31.548	5.118	3.064	5.118	3.064
NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.	2	13.000	7.000	3.000	0.275	0.500	0.275	0.500
NAVAL ELECTRONICS LABORATORY CENTER, SAN DIEGO, CALIF.	1987	457.011	152.725	225.883	11.898	33.971	11.898	33.971
NAVAL ENVIRON PREDICTION RSCH. FACILITY MONTEREY, CAL.	0	0.000	0.843	6.351	0.000	0.070	0.000	0.070
NAVAL MEDICAL FIELD RESEARCH LAB., CAMP LEJEUNE, N.C.	3	28.226	8.655	15.590	0.490	0.600	0.490	0.600
NAVAL MEDICAL RESEARCH INSTITUTE, NMMC, BETHESDA	4	151.730	21.561	26.590	3.993	0.542	3.993	0.542
NAVAL MEDICAL RESEARCH UNIT NO.1, BERKELEY, CALIF.	0	0.000	0.000	0.000	0.000	0.296	0.000	0.296
NAVAL MEDICAL RESEARCH UNIT NO.2, TAIPEI, TAIWAN	2	65.332	21.800	0.000	0.000	0.781	0.000	0.781
NAVAL MEDICAL RESEARCH UNIT NO.3, CAIRO, EGYPT	5	43.420	6.610	16.437	0.606	0.000	0.606	0.000
NAVAL MEDICAL RESEARCH UNIT NO.4, GREAT LAKES, ILL	1	28.702	11.576	13.649	0.387	0.397	0.387	0.397
NAVY MED. NEUROPSYCHIATRIC RES. UNIT, SAN DIEGO, CAL.	0	11.177	4.500	0.000	0.000	0.221	0.000	0.221
NAVAL DRONANCE LABORATORY, WHITE OAK, MD.	1059	311.167	182.543	1019.410	46.207	32.595	46.207	32.595
NAVAL PERSONNEL RESEARCH ACTIVITY, SAN DIEGO, CALIF.	1	47.300	4.900	0.000	0.210	0.277	0.210	0.277
NAVAL PERSONNEL RSCH AND DEVELOPMENT LAB, WASH., D. C.	0	22.156	2.703	1.424	0.652	0.400	0.652	0.400
NAVAL RESEARCH LABORATORY, WASHINGTON, D.C.	2049	1544.718	182.791	645.850	76.107	58.124	76.107	58.124
NAVAL SHIP RESEARCH AND DEVELOPMENT CTR., WASH., D.C.	975	550.910	203.006	1779.348	79.474	49.842	79.474	49.842
NAVAL SUBMARINE MED. RSCH LAB, NEW LONDON, GROTON, CONN	0	27.160	10.382	18.279	0.000	1.250	0.000	1.250
NAVAL TRAINING DEVICES CENTER, ORLANDO, FLA.	60	93.580	201.356	123.346	2.850	4.401	2.850	4.401
NAVAL UNDERSEA R+D CENTER, SAN DIEGO, CALIF.	37615	331.944	33.457	646.854	36.703	44.540	36.703	44.540
NAVAL UNDERSEA R+D CENTER, NEWPORT, R.I.	338	488.273	200.907	581.202	28.158	19.859	28.158	19.859
NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.	1092920	1310.547	169.566	5095.208	227.607	82.899	227.607	82.899
NAVAL WEAPONS LABORATORY, DAHLGREN, VA.	4490	541.641	76.042	933.132	64.979	30.977	64.979	30.977
TOTALS	1142844	8555.467	1768.841	12356.129	641.538	423.033	641.538	423.033



TABLE 6A. AIR FORCE R+D FACILITIES DATA, FY 1971

INSTALLATION	ACRES	SPACE (THOUSANDS OF SQUARE FEET)		SPACE AND PROPERTY		COST (MILLIONS \$)	
		LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT	TOTAL
AEROPROPULSION LAB., WPAFB, OHIO	48	389.500	66.500	274.775	12.894	16.713	
AEROSPACE MEDICAL LAB. (CLINICAL), LACKLAND AFB, TEX	1	7.587	1.467	2.200	0.148	0.849	
6578 AEROSPACE MEDICAL RES. LAB., WPAFB, OHIO	30	211.900	10.000	15.200	11.570	15.484	
AEROSPACE RESEARCH LABORATORIES, WPAFB, OHIO	50	134.287	28.512	34.719	10.543	11.861	
AVIONICS LAB., WPAFB, OHIO	265	224.287	5.304	271.253	20.872	34.478	
CAMBRIDGE RESEARCH LABS., L.G. HANSCOM FLD., MASS.	947	611.201	19.708	125.916	22.500	60.268	
FLIGHT DYNAMICS LAB., WPAFB, OHIO	90	537.300	56.600	26.000	22.900	52.750	
FRANK J. SEILER RESEARCH LAB., ACADEMY, COLO.	0	9.394	2.860	0.240	1.270	1.466	
HUMAN RESOURCES LAB., BROOKS AFB, TEX.	13	63.830	24.390	8.430	1.850	3.976	
MATERIALS LAB., WPAFB, OHIO	5	0.213	0.022	0.038	6.600	9.600	
ROCKET PROPULSION LAB., EDWARDS AFB, CALIF.	54400	419.046	99.248	4.760	29.572	25.653	
ROME AIR DEVELOPMENT CENTER, GRIFFIS AFB, N.Y.	2784	741.466	112.793	187.306	24.958	91.264	
WEAPONS LAB., KIRTLAND AFB, N.M.	1174	430.547	14.620	22.187	9.913	32.340	
TOTALS	59803	3700.478	442.024	973.044	173.582	356.702	

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INSTALLATION AEROMEDICAL RESEARCH LAB., FT. RUCKER, ALA.

C.O. COL ROBERT W. BAILEY TECH. DIR. DR. E.J. BALDES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.029	0.986
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.521	0.470
TOTAL ANNUAL LAB	1.550	1.456
TOTAL INHOUSE	1.550	1.456
TOTAL INHOUSE RDT+E	1.029	0.986
ANNUAL OPERATING COST	0.540	0.690

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	TOTAL	
MILITARY	48	17	43	5	
CIVILIAN	23	1	2	21	
TOTAL	71	18	45	26	

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
0	LAB 21.495	ADMIN 5.940	OTHER 7.470	34.905	0.203	1.340

...MISSION

MISSION IS TO CONDUCT TIMELY STUDIES ON CURRENT AND ANTICIPATED RESEARCH PROBLEMS OF A FUNDAMENTAL OR IMMEDIATE NATURE RELEVANT TO ARMY AVIATION AND AIRBORNE PHYSICAL PERFORMANCE STANDARDS AND THE MEDICAL ASPECTS OF RETENTION AND SELECTION OF AVIATORS AND PARACHUTISTS.

...CURRENT IMPORTANT PROGRAMS

RESEARCH PSYCHOLOGY APPLIED TO MEDICALLY SIGNIFICANT PROBLEMS IN ARMY AVIATION. MEDICAL RESEARCH APPLIED TO THE PROBLEMS IN ARMY AVIATION. RESEARCH OF VISUAL PROBLEMS MEDICALLY SIGNIFICANT TO ARMY AVIATION. RESEARCH OF PSYCHOACOUSTICAL PROBLEMS MEDICALLY SIGNIFICANT TO ARMY AV. RESEARCH OF BIOENGINEERING PROBLEMS MEDICALLY SIGNIFICANT TO ARMY AV.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOR FUNCTIONS TO STUDY THE PHYSIOLOGICAL AND PSYCHOLOGICAL ASPECTS OF AVIATION AND AIRBORNE PERSONNEL IN THE TRAINING AND OPERATIONAL ENVIRONMENT.

MAJOR EQUIPMENT INCLUDES A SOUNDPROOF HEARING ROOM, ANECHOIC CHAMBER, COLORIMETER, ECG AND EEG MACHINES, A BIOCHEMISTRY LAB, AN ELECTRONICS AND ENGINEERING FABRICATION SHOP, PHOTOGRAPHY LABORATORY AND AIRBORNE MONITORING EQUIPMENT.

INSTALLATION AIRBORNE, ELECTR. AND SPECIAL WARFARE BD., FT BRAGG NC  
 PRES. COL PETER E. KELLY ENGIN. ADV. EDWIN S. SPAINHOUR

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.323	1.295
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	2.867	2.976
TOTAL ANNUAL LAB	4.190	4.271
TOTAL INHOUSE	4.190	4.271
TOTAL INHOUSE RDT+E	1.323	1.295
ANNUAL OPERATING COST	0.093	0.093

PERSONNEL DATA (END OF FY 1971)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	205	0	52	153
CIVILIAN	55	0	8	47
TOTAL	260	0	60	200

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	0.000	50.879	76.398	127.277	0.000	2.925

...MISSION

PLAN, CONDUCT, AND REPORT ON EXPANDED SERVICE TESTS AND CHECK TESTS OF AIRBORNE, COMMUNICATIONS AND ELECTRONICS EQUIPMENT AND SYSTEMS. THE COMMUNICATIONS AND ELECTRONICS-TYPE TESTS ARE USED AT DIV LEVEL OR BELOW. THE AIRBORNE TSTS PERTAIN TO EQUIP + SYS WHICH SUPP AIRDROP + TRANSPORT.

...CURRENT IMPORTANT PROGRAMS

TEST OF C5A AIRPLANE  
 CHECK TEST OF OVID MOHAWK SURVEILLANCE SYSTEMS  
 TACFIRE OF ADSAF

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FACILITIES INCLUDE BOARD HANGAR BUILDING, COMMUNICATIONS-ELECTRONICS TEST FACILITY, CRYTOGRAPHIC TEST FACILITY, AND WOODWORK SHCP. MAJOR EQUIPMENT INCLUDES TWO T-28A AND 2 T-28B AIRCRAFT USED IN AERIAL PHOTOGRAPHY MOTION PICTURE, BLACK AND WHITE AND COLOR, 40,000-POUND LOADER, 5-TON WRECKER, 20-TON MOBILE CRANE, 3 SEMITRAILERS, SEVERAL STANDARD VEHICLES, ONE U-6 AIRCRAFT, ONE UH-1 AIRCRAFT, VARIOUS TYPES OF STANDARD PARACHUTES, STANDARD PLATFORMS, ELEVEN GASOLINE DRIVEN GENERATORS, BALLASTABLE AIRDROP VEHICLES WITH REMOVABLE WEIGHT INCREMENTS, THREE ANEMOMETERS, VARIOUS THERMOMETERS, STOPWATCHES, ELEVEN TACTICAL RADIO SETS, TWO RADIO RECEIVERS, SIX TELETYPEWRITER SETS, TWENTY-TWO SIGNAL GENERATORS, TWO SOUND LEVEL METERS AND ONE SOUND AND VIBRATION ANALYZER.

INSTALLATION AIR DEFENSE BOARD, FT. BLISS, TEX.

PRES. COL WILLIAM H. HULCOMBE, JR.

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	3.693	3.097
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	2.591	2.677
TOTAL ANNUAL LAB	6.284	5.774
TOTAL INHOUSE	6.183	5.732
TOTAL INHOUSE RDT+E	3.592	3.055
ANNUAL OPERATING COST	0.528	0.525

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	354	2	54	300
CIVILIAN	114	0	11	103
TOTAL	468	2	65	403

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
26	LAB 36.550	ADMIN 38.646	OTHER 77.417	152.613	2.196	11.055

...MISSION

PLAN, CONDUCT, REPORT ON, CHECK, TEST OF AIR DEF EQUIP+SYS.  
PARTICIPATE IN ENG TEST, INIT PROD TEST, PRE-PROD TEST+ OTHER TESTS.  
PROVIDE ADVICE TO PROPONENT AGENCIES DURING DEVELOPMENT OF EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS

PRODUCT IMPROVEMENT TEST NIKE-HERCULES SAMCAP MODIFICATION  
SERVICE TEST OF IMPROVED HAWK TROPIC  
SERVICE TEST OF AN/TSQ-73  
SERVICE TEST OF FORWARD AREA ACQUISITION RADAR  
VULCAN AIR DEFENSE EFFECTIVENESS STUDY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ASSURE MAX UTILIZATION OF RESOURCES IN ACCOMPLISHMENT OF MISSION. PLAN, CONDUCT, RECORD+REPORT RESULTS OF TEST AND EVALUATION OF WPN SYS+FIRE DIST SYS. EVALUATE ITEMS FOR SAFETY, SUITABILITY FOR ARMY USE OR SUITABILITY FOR ISSUANCE TO FLD. COMMENTS ON CMDQ/QMR/SDR+MAINT PKG. ASSIST IN REVISIONS OF MIL SPECS. SUPPORT FLD RSCH STUDIES, TESTS+OPERATIONS. PROVIDE REPRESENTATION+SELECTION OF TRAINING AID. EQUIPMENT, COMPUTER, TAC+INSTRUMENTATION RADAR, CINE THEODOLITE, PHOTO LAB AND FILM READING EQUIPMENT. SITE MONITOR FOR ELECTRONIC TEST OF EQUIP+ RANGE FOR FIRING FORWARD AREA WPNS TGT DEVICES + TARGET DRONES.

INSTALLATION AIR MOBILITY RSCH AND DEVEL LAB. MOFFETT FIELD, CALIF

DIR. PAUL F. YAGGY DEPUTY DIR. COL LESTER C. FARWELL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	37.026	51.623
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.001	0.001
TOTAL OTHER	0.062	0.075
TOTAL ANNUAL LAB	37.089	51.703
TOTAL INHOUSE	24.113	22.050
TOTAL INHOUSE RDT+E	24.050	21.970
ANNUAL OPERATING COST	2.479	3.390

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	55	1	33	22
CIVILIAN	551	19	230	321
TOTAL	606	20	263	343

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
108	85.014	43.308	15.584	143.906	1.474	5.446

...MISSION  
MANAGES AND EXECUTES R+D OF ARMY AIR MOBILE SYSTEMS THROUGH  
DEMONSTRATION OF TECHNOLOGY. PROVIDES TECH SUPPORT TO PROJECT/PRODUCT  
MANAGERS + SYSTEM DEVELOPERS AS REQ. PROVIDES INDEPENDENT TECHNICAL RISK  
ASSESSMENT TO CG USAAVSCOM + HIGHER AUTHORITY.

...CURRENT IMPORTANT PROGRAMS  
RESEARCH IN FUNDAMENTAL ROTOR AERODYNAMICS, DYNAMICS + NOISE. R+D  
OF SMALL GAS TURBINES. R+D TO IMPROVE RELIABILITY AND MAINTAINABILITY  
OF AIR MOBILE SYSTEMS. RESEARCH COMPOSITES AND MEASURE OPERATIONAL  
FLIGHT LOADS TO IMPROVE STRUCTURES FOR AIRCRAFT. EVOLVE TECHNOLOGY AND  
CRITERIA TO IMPROVE FLIGHT SAFETY AND SURVIVABILITY.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
THREE DIRECTORATES- MOFFETT FIELD, CA., CLEVELAND, OH., HAMPTON, VA. CO-  
LOCATED WITH NASA PARTICIPATING IN RSCH OF AIR MOBILE SYSTEMS AND  
DISCIPLINES, JOINTLY USING WIND TUNNELS, SIMULATORS + LAB TEST FAC INCL  
SHOPS, FLIGHT LINE + HANGAR, STRUCTURE LAB, ENGINE TEST FAC + COMPUTA-  
TIONAL EQUIPMENT. FOURTH DIRECTORATE AT FT. EUSTIS, VA., PERFORMING  
ADVANCED APPLICATIONS WORK, MAJOR EQUIPMENT AND FACILITIES- FILAMENT  
WINDING MACHINES, TENSILE TESTERS, VIBRATION TESTER, SMALL BALLISTIC  
RANGE, CALIBRATION LAB, IBM 360-44, ENVIRONMENT CHAMBER, ATOMIC  
ABSORPTION SPECTROMETER, TELEMETER GROUND STATION, NON-DESTRUCTIVE  
TESTING FACILITY, FLIGHT SAFETY LAB.

INSTALLATION ARCTIC TEST CENTER, FT. GREELY, ALASKA

C.O. COL DAVID J. SCHUMACHER TECH. ADV. JERRELL L. SANDERS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.221	2.580
TOTAL PROCUREMENT	0.006	0.035
TOTAL O+M	0.005	0.009
TOTAL OTHER	2.530	2.232
TOTAL ANNUAL LAB	4.762	4.856
TOTAL INHOUSE	4.752	4.821
TOTAL INHOUSE RDT+E	2.211	2.550
ANNUAL OPERATING COST	1.837	2.009

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	333	0	54	279
CIVILIAN	27	0	3	24
TOTAL	360	0	57	303

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
726207	11.126	34.584	214.237	259.947	34.962	7.349

...MISSION

PLAN + CONDUCT + REPORT ON ENVIRONMENTAL PHASES OF ENGINEERING SERVICE  
CHECK CONFIRMATORY + OTHER TESTS + EVALUATIONS FOR TECOM PROJECT MGRS +  
OTHER COMMODITY COMMANDS PARTICIPATE IN + MONITOR TRCCP TESTS PROVIDE  
ADVICE TO PROPONENT AGENCIES DURING DEVELOPMENT OF MATERIEL

...CURRENT IMPORTANT PROGRAMS

INITIAL PROU TEST OF M792 AMBULANCE  
SVC TEST OF 105MM CARTRIDGE, XM548  
ENGR TEST OF M608 + M616 MINE FUZES  
ENGR TEST OF NYLON TUBING  
MILITARY POTENTIAL TEST OF VEHICLE HEATERS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOREQUIPMENT + FACILITIES- 3 MULTIPURPOSE TEST SITES, A NETWORK OF  
VEHICLE MAINTENANCE SHOPS ROTARY + FIXED WING SUPPORT, A SUPPLY COMPLEX  
PHOTO GRAPHIC ARTS + INSTRUMENTATION SHOPS + CALIBRATION FACILITIES  
FACILITIES CAPABILITIES-SUPPORT + TECHNOLOGICAL ASSISTANCE FOR TESTING  
OF ARMOR INFANTRY ARTILLERY COMMO AIRCRAFT GENL EQUIP NUCLEAR BIOLOGICAL  
+ CHEMICAL ITEMS

INSTALLATION ARMOR AND ENGINEER BOARD, FT. KNOX, KY

PRES. COL A.H. HISLOP TECH. ADV. A.E. ELKINS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.854	2.063
TOTAL PROCUREMENT	0.130	0.220
TOTAL O+M	0.000	0.220
TOTAL OTHER	2.700	2.900
TOTAL ANNUAL LAB	4.684	5.163
TOTAL INHOUSE	4.537	5.163
TOTAL INHOUSE RDT+E	1.707	2.063
ANNUAL OPERATING COST	0.379	0.400

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	431	0	66	365
CIVILIAN	98	0	8	90
TOTAL	529	0	74	455

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
6570	6.200	68.068	258.345	332.613	8.300	2.350

...MISSION  
PLAN, CONDUCT AND REPORT ON ST AND CK TESTS OF ARMOR AND ENGR EQUIP, AUTO SYS AND MATERIAL, AND ATOMIC DEMO MUNITIONS. PARTICIPATE IN ET, IP, AND PP TESTS AS DIRECTED. PROVIDE ADVICE TO AGENCIES AND DEVELOPERS IN DEVELOPMENT OF ARMOR AND ENGINEERING EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS  
IMPLEMENTATION OF TEAM-UP, PART D.  
IMPROVEMENT OF ALL ASPECTS OF MILITARY SERVICE UNDER VOLAR CONCEPT.  
ST-IMPROVED RIBBON BRIDGE BEING CONDUCTED ON SEQUALITCHEW RIVER, WASH.  
ST-HVY EQUIP TRANSPORTER HET-70 22 1/2 TON W/SEMITRAILER, 60TON, XM747  
IP-LANDING CRAFT LCM-8 BEING CONDUCTED-US NAVY BASE, CORONADO, CALIF

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
USAARENBD MAJOR EQUIP: ADEQUATE STILL AND MOTION PICTURE PHOTO EQUIP  
VIDEO TAPE RECORDER STATIONARY ELEVATED CAMERA PLATFORM FOR HEIGHTS UP  
TO 40 FT ABOVE ADJACENT GRADE GENERATOR LOAD BANKS MOBILE DYNAMOMETER,  
WHICH MEASURES DRAW BAR PULL FROM 0 TO 100 TONS OVERHEAD CRANE, 40 TON  
TACTICAL WHELD VEH COMBAT VEH ENGR CONSTR EQUIP MACHINE SHOP EQUIP  
AND SHOP MAINTENANCE SETS.  
THE BOARD FACILITIES CONSIST OF 6400 ACRES FOR TESTING MCFARLAND-OLIVER  
RANGE 160 ACRES WITH A FIRING CAPABILITY OF UP TO 2000 METERS ADD L  
RANGE WITH FIRING UP TO 10,000 METERS ON A SPACE AVAIL BASIS STILL  
WATER TEST AREA BARRACKS SPACE 72988 SQ FT OFFICE SPACE 71780 SQ FT  
SHOP AREA 69888 SQ FT STORAGE 48106 SQ FT AND MOTOR PARK 85750 SQ FT.

INSTALLATION ARMY MATERIAL SYST AND ANAL AGENCY, ABERDEEN P.G., MD.

C.O. COL RUDOLPH A. AXELSON DIR. DR. JOSEPH SPERRAZZA

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	12.041	12.328
TOTAL PROCUREMENT	0.191	0.000
TOTAL O+M	1.604	1.662
TOTAL OTHER	0.020	0.000
TOTAL ANNUAL LAB	13.856	13.990
TOTAL INHOUSE	8.261	8.729
TOTAL INHOUSE RDT+E	7.179	7.828
ANNUAL OPERATING COST	1.578	1.782

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	13	0	13	0
CIVILIAN	314	3	238	76
TOTAL	327	3	251	76

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
4	41.964	10.491	34.970	87.425	1.923	4.815

...MISSION

PROVIDE CENTRAL TECHNICAL CAPABILITY FOR AMC SYSTEMS ANALYSIS RELIABILITY + IMPROVEMENT IN CAPABILITY + PERFORMANCE ANALYZE EFFECTIVENESS AND DETERMINE LOG REQUIREMENTS FOR NEW/EXISTING ARMY MATERIAL SYSTEM TO PROVIDE ALTERNATIVES TO AMC DECISION MAKERS PLAN + MANAGE JTCG/ME EFFORT

...CURRENT IMPORTANT PROGRAMS

MANAGEMENT AND SUPPORT-- AMSAA  
ANTI-ARMOR SYSTEMS + ARMOR VULNERABILITY  
WEAPONS EFFECTS/TARGET VULNERABILITY  
AIRCRAFT WEAPON SYSTEM EFFECTIVENESS  
JOINT TECHNICAL COORDINATING GROUP/MUNITIONS EFFECTIVENESS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT AMC WPN SYS ANALYSIS AND EVAL OF MATERIAL CONCEPTS AND PROPOSALS DEVELOPS, IMPROVES, AND DISSEMINATES METHODOLOGY AND TECHNIQUES FOR CONDUCT OF SYS ANALYSIS, ANAL OF PERFORMANCE, SCHEDULE AND COST RISKS, DESIGN, CONDUCT AND EVAL OF TESTS. EVAL LIFE CYCLE REQ OF MATERIAL SYS. CONDUCTS TACTICAL, OPERATIONAL ANALYSIS OF WPN + MATERIAL SYSTEMS. RELIABILITY, AVAILABILITY AND MAINTAINABILITY CENTER FOR ARMY SYS. TECH DIR OF AMC SURVEILLANCE PROGRAM FOR STOCKS OF ARMY MISSILES, NUCLEAR, AND NONNUCLEAR AMMUNITION. PROVIDE TECH COORD, DATA, AND ANALYSIS FOR DETERMINATION OF JOINT SERVICES MUNITIONS EFFECTIVENESS MODELS AND MANUALS.

INSTALLATION ARTILLERY BOARD, FT. SILL, OKLA.

PRES. COL ROBERT T. BLAKE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.958	0.857
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	2.710	3.077
TOTAL ANNUAL LAB	3.668	3.934
TOTAL INHOUSE	3.538	3.874
TOTAL INHOUSE RDT+E	0.828	0.797
ANNUAL OPERATING COST	0.248	0.200

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	389	0	138	251
CIVILIAN	39	0	2	37
TOTAL	428	0	140	288

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
230	4.008	61.245	39.758	105.011	0.000	1.340

...MISSION

PLAN CONDUCT AND REPORT ON EXPANDED SERVICE TEST DEVELOPMENTAL  
SUITABILITY TESTS CHECK TESTS PRODUCT IMPROVEMENT TESTS AND MILITARY  
POTENTIAL TESTS AS PRESCRIBED IN AR 70-10  
PROVIDE ADVICE TO PROPONENT AGENCIES AND DEVELOPERS

...CURRENT IMPORTANT PROGRAMS

SERVICE TEST LANCE SYSTEM XM234 XM252 XM198  
SERVICE TEST TACFIRE  
SERVICE TEST GYRO AZIMUTH LT WEIGHT  
SERVICE TEST FUZE MTSQ XM577 XM582E1  
SERVICE TEST HOWITZER 8 INCH SELF PROPELLED FULL TRACK M110E2

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT MIL. POTENTIAL, EXPANDED SERVICE, INITIAL PROGN. AND PROD.  
IMPROVEMENT TESTS OF FA MATERIAL  
FIELD ARTILLERY TEST ITEMS  
MAINTAIN TEST ITEMS DURING TEST PERIOD  
SPECIAL EFFECTS FIELD UTILIZED FOR IMPROVED CONVENTIONAL MUNITIONS

INSTALLATION            ATMOSPHERIC            SCIENCE LAB. WHITE SANDS, NEW MEXICO  
 C.O. AND DIR. COL RICHARD C. CHABOT            DEPUTY DIR. DR. MARVIN DIAMOND

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	10.023	8.939
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.107	0.013
TOTAL OTHER	2.669	3.004
TOTAL ANNUAL LAB	12.799	11.956
TOTAL INHOUSE	10.716	9.921
TOTAL INHOUSE RDT+E	7.940	6.904
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL DATA (END OF FY 1971)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	516	0	12	504
CIVILIAN	253	10	114	139
TOTAL	769	10	126	643

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
45	0.050	0.025	0.023	0.098	48.000	25.000

...MISSION

RESEARCH IN ATMOSPHERIC SCIENCES, DEVELOPMENT OF METEOROLOGICAL TECHNIQUES AND EQUIPMENT FOR FIELD ARMY. FURNISH METEOROLOGICAL SERVICES TO ARMY RDT E ACTIVITIES. PROVIDE ADMIN AND LOGISTICAL SUPPORT TO OTHER ECOM ELEMENTS AT WHITE SANDS MISSILE RANGE, NEW MEXICO.

...CURRENT IMPORTANT PROGRAMS

DETERMINATION OF ATMOSPHERIC EFFECTS ON ARMY SYSTEMS  
 DEVELOP ARMY ATMOSPHERIC SENSING SYSTEMS, TECHNIQUES, APPLICATIONS  
 RESEARCH OF MICROSCALE, MESOSCALE, AND UPPER ATMOSPHERIC PHENOMENA  
 ATMOSPHERIC MODIFICATION  
 METEOROLOGICAL SUPPORT TO RDT E ACTIVITIES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

METEOROLOGICAL RESEARCH FACILITY AND CAPABILITY  
 WIND TUNNEL FACILITY, LOW SPEED  
 ATMOSPHERIC PHYSICS RESEARCH FACILITY AND CAPABILITY  
 UPPER ATMOSPHERIC RESEARCH AND SOUNDING ROCKET FACILITY AND CAPABILITY  
 ION MASS SPECTROMETER SYSTEM  
 METEOROLOGICAL SOUNDING ROCKET FACILITIES-N.M., UTAH, ALASKA, CANAL ZONE  
 REMOTE ATMOSPHERIC SENSING FIELD RESEARCH FACILITY  
 ATMOSPHERIC SPECTROSCOPY-LASER PROPAGATION FACILITY  
 METEOROLOGICAL RDT E SUPPORT FACILITIES- ALASKA TO PANAMA CANAL ZONE  
 METEOROLOGICAL INSTRUMENTATION TEST, MAINTENANCE, CALIBRATION FACILITY  
 FACILITY FOR SONIC OBSERVATION OF TRAJECTORY AND IMPACT OF MISSILES  
 COLOR DENSITOMETER FOR ANALYSIS OF METEOROLOGICAL SATELLITE DATA

INSTALLATION AVIATION TEST ACTIVITY, EDWARDS AFB, CAL.

C.O. LTC GERALD E. SWECKER TECH. DIR. JAMES S. HAYDEN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.740	2.979
TOTAL PROCUREMENT	0.225	0.312
TOTAL O+M	0.188	0.022
TOTAL OTHER	0.664	0.725
TOTAL ANNUAL LAB	3.817	4.010
TOTAL INHOUSE	3.768	4.010
TOTAL INHOUSE RDT+E	2.691	2.979
ANNUAL OPERATING COST	0.700	0.700

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	75	0	56		19
CIVILIAN	141	1	33		108
TOTAL	216	1	89		127

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
9	LAB 4.280	ADMIN 32.830	OTHER 98.490	135.600	1.140	3.627

...MISSION

ENGR FLIGHT EVAL OF AIR VEHICLES  
CONSIDERED FOR ARMY APPLICATION OR INCORP ADV CONCEPTS WITH POTENTIAL  
MILI APPLI PRODUCE TEST DATA ON BASIC AIR VEH PERF HANDLING QUAL SYS/SUB  
SYS INTERFACE, AND INTEGRATED SYS MAINTAINABILITY AND RELIABILITY

...CURRENT IMPORTANT PROGRAMS

CH-54 AIRWORTHINESS AND FLT CHAR  
OH-58 250-C20 ENG  
AH-56 ADV PRODN ENG  
UH-1H TAIL ROTOR PERF  
FOREST SER SPT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

1 T28 1 C47 1 U8G 3 F51D 1 OVIC 1 CH47B 1UH1C 1UH1M 2LH1H 6TEST ACFT

AIRBORNE ACQUISITION SYSTEMS

2REMOTE GROUND STATIONS WITH COMPUTER AND TELEMETRY CAPABILITY  
MAGNETIC TAPE SELECTRIC TYPEWRITERS FOR TEST REPORT PREPARATION  
LIMITED INSTRUMENT CALIBRATION CAPABILITY

INSTALLATION AVIATION TEST BOARD, FT. RUCKER, ALA.

PRES. COL D.E. GUST

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	5.256	6.139
TOTAL PROCUREMENT	0.054	0.799
TOTAL O+M	0.233	2.127
TOTAL OTHER	2.098	2.022
TOTAL ANNUAL LAB	7.641	9.065
TOTAL INHOUSE	5.341	7.012
TOTAL INHOUSE RDT+E	2.956	4.084
ANNUAL OPERATING COST	2.231	2.665

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	250	0	43	207
CIVILIAN	139	0	5	134
TOTAL	389	0	48	341

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
2149	3.018	19.190	155.272	177.480	2.654	14.411

...MISSION

PLAN, CONDUCT AND REPORT ON AIRCRAFT SERVICE AND CHECK TESTS AND AUXILIARY EQUIPMENT. PARTICIPATE IN ENGINEERING TESTS ETS, INITIAL PRODUCTION TESTS IPIS AND APPROPRIATE PREPRODUCTION TESTS PPTS AS DIRECTED. ADVISE PROPONENT AGENCIES DURING THE DEVELOPMENT OF AIRCRAFT SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

CHEYENNE  
CH-47C  
OH-58  
HELMS  
PRODUCT IMPROVEMENT ON UH-1

...FUNCTIONS/EQUIPMENT/CAPABILITIES

USAAVNTBD HAS THE FACILITIES AND CAPABILITIES TO PLAN, CONDUCT, RECORD AND REPORT THE RESULTS OF TESTS AND EVALUATIONS. REVIEW AND COMMENT ON QMDS, QMRS, SDRS, MAINTENANCE PACKAGES AND ASSIST IN THE REVIEW OF MILITARY SPECIFICATIONS. EVALUATE AND RECOMMEND ON THE SAFETY AND SUITABILITY OF MATERIALS FOR ARMY USE. SUPPORT FIELD RESEARCH, STUDIES, TESTS AND OPERATIONS OF OTHER USAMC SUBORDINATE ELEMENTS, CA OR DOD AGENCIES. PLAN, DIRECT AND CONTROL PROGRAMS IN METHODOLOGY TO ASSURE PROPER TESTING AND REPORTING IN CURRENT AND FUTURE YEARS. ASSIST IN PREPARATION OF TRAINING LITERATURE AND SELECTION OF TRAINING AIDS. RECOMMEND TO CG, USATECOM, THROUGH ESTABLISHED PROCEDURES RESEARCH AND DEVELOPMENT PROJECTS DESIGNATED TO IMPROVE USATECOM TEST AND EVALUATION.

INSTALLATION AVIONICS LABORATORY, FORT MONMOUTH, N.J.

C.O. LTC EVERETT RICHARDS TECH. DIR. THEODORE SUETA

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	11.240	8.176
TOTAL PROCUREMENT	3.045	2.548
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	14.285	10.724
TOTAL INHOUSE	11.013	9.842
TOTAL INHOUSE RDT+E	8.118	7.474
ANNUAL OPERATING COST	3.713	4.233

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	30	1	29	1
CIVILIAN	209	4	144	65
TOTAL	239	5	173	66

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
25	67.149	4.378	1.706	73.233	2.604	11.980

...MISSION

APPLIED RES DEVEL AND ENGRG IN ARMY AVIATION ELECTRONICS INCLUDING  
NAVIGATION LANDING COMMUNICATIONS ENVIRONMENT SENSING CONTROL THEORY  
AIRCRAFT ANTENNAS INSTRUMENTATION GROUND AND AIRBORNE SYSTEMS  
INSTALLATION AND TEST SYSTEMS ENGRG

...CURRENT IMPORTANT PROGRAMS

LOW LEVEL NIGHT OPERATIONS FOR ARMY AIRCRAFT  
LORAN CD NAVIGATION SYSTEM  
ATTENDED AREA TACTICAL LANDING SYSTEM  
HELICOPTER MULTIFUNCTION SYSTEM  
AIRCRAFT SYSTEMS ENGINEERING

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TACTICAL AVIONICS SYSTEMS SIMULATOR  
AIRCRAFT ANTENNA TEST FACILITY  
FIXED BASE COCKPIT SIMULATOR JH-1  
INSTRUMENTED C-47 AIRCRAFT FOR TESTING NAVIGATION SYSTEMS  
GYRO TEST FACILITY  
MOVING EARTH SIMULATOR FOR DOPPLER NAVIGATOR TESTING  
ELECTROMAGNETIC RADIATION TEST FACILITY

INSTALLATION BALLISTIC RES. LABS., ABERDEEN PROVING GROUND, MD.  
 C.O. COL RUDOLPH A. AXELSON TECH. DIR. CR. ROBERT J. EICHELBERGER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	24.379	23.792
TOTAL PROCUREMENT	0.279	0.152
TOTAL O+M	0.327	0.245
TOTAL OTHER	0.000	0.100
TOTAL ANNUAL LAB	24.985	24.285
TOTAL INHOUSE	19.309	18.813
TOTAL INHOUSE RDT+E	18.718	18.318
ANNUAL OPERATING COST	5.593	5.542

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	76	12	73		3
CIVILIAN	724	73	423		321
TOTAL	800	85	476		324

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
3469	298.232	74.558	248.526	621.316	12.786	19.582

...MISSION

CONDUCT RES + EXPL DEVL IN SCIENCES/TECHNOLOGIES NECESSARY FOR  
 CONCEIVING DESIGNING DEVELOPING AND EVALUATING WEAPONS SYSTEMS.  
 PURSUE ORIENTED FUND RESEARCH IN PHYSICS CHEM MATH ENGR + BIOPHYSICS  
 INVESTIGATE PERTINENT BRANCHES OF MILITARY SCIENCE + TECHNOLOGIES

...CURRENT IMPORTANT PROGRAMS

MATHEMATICAL MODELS OF GUN PROPELLANT SYSTEMS  
 PENETRATION MECHANICS  
 WARHEAD DYNAMICS FRAGMENTATION-EXPLOSIVE METAL INTERACTION  
 REFINED FLIGHT DYNAMICS OF PROJECTILES AND MISSILES  
 VULNERABILITY GROUND + AIRBORNE TARGETS-OFFENSIVE/DEFENSIVE MEASURES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

SUPERSONIC + HYPERSONIC WIND TUNNELS/TRANSONIC RANGE  
 EXPLOSIVE BLAST CHAMBERS AND HIGH ALTITUDE BLAST SPHERE  
 SHOCK TUBES-SIMULATION OF NUCL BLAST/CHEMICAL REACTION RATE  
 PULSE RADIATION FACILITY-TANDEN VAN DE GRAAFF ACCELERATOR  
 EXPLOSIVE FIELD TEST FACILITIES  
 HIGH SPEED MOTION PHOTOGRAPHY SCHLIEREN INTERFEROMETRY  
 ELECTRON MICROSCOPE-ELECTRON SPIN RESONANCE-NUCL MAGNETIC RESEARCH  
 ELECTROMAGNETIC RADIATION RANGES  
 ANALOG COMPUTER FOR SIMULATION OF DYNAMICS OF GUN AND RIFLE  
 PROPULSION AND COMBUSTION CHAMBERS  
 LASERS FOR PLASMA PROPAGATION AND SIGNATURES  
 AFTER GLOW REACTION CHAMBER-UPPER ATMOSPHERE CHEM REACTION RATE

INSTALLATION BEHAVIORAL SCIENCE RES. LAB., WASH., D.C.

DIR. DR. J.E. UHLANER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.721	3.715
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	2.721	3.715
TOTAL INHOUSE	1.951	1.965
TOTAL INHOUSE RDT+E	1.951	1.965
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	4	0	1	3
CIVILIAN	83	24	57	26
TOTAL	87	24	58	29

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
0	26.816	4.367	1.893	33.076	0.000	1.905

...MISSION

RSCH IN BEHAVIORAL SCI AND OPS RSCH SUPPORTING BROAD AREAS OF PERS MGMT HUM PERF EXPERIMENTATION AND MANNED SYS RSCH. RSCH CONDUCTED IN AND FOR DEPT ARMY TO MEET OBJ OF ARMY-WIDE SIGNIFICANCE AND RSCH DIRECTED TOWARD OPTIMAL EMPLOYMENT OF ARMY PERS IN VARIETY OF MILITARY SETTINGS

...CURRENT IMPORTANT PROGRAMS

HUMAN FACTORS RSCH ON CAREER DEVELOP OF O LDRS  
RSCH ON SCREENING AND DIFFERENTIAL CLASSIFICATION OF EM  
EVAL ALTERNATIVE MANP POLS IN PERS OPNS THROUGH MODELS  
RSCH ON BEH FUNCTIONS OF CRITICAL HUM PERF IN NT OPNS  
RSCH ON MAN MACHINE FUNCTIONS IN INTELL PROCESSING

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PROGRAM COMPRISES 4 RSCH AREAS 1 PERS MGMT RSCH-SELECTION. THIS EFFORT CONCERNED WITH PRED INDIV HUM PERF EFFECTIVENESS. 2 PERS MGMT RSCH--MNPWR MGMT, CONCERNED WITH EVAL AND SEL PERS MGMT POLS THRU OPNS RSCH MODLING. 3 HUM PERF EXPERIMENTATION. CONCERNED WITH IMPROVING FUNCTIONL PORTIONS OF PERF--CRIT BEH IN JOBS. MOBILE, FULLY AUTCMATED, ON-LINE MAGNETIC TAPE SYSTEM RECORDS AUTOMATICALLY IN REAL TIME TARGET ACQUIS RESPONSES AND SEARCH BEH OF SOLDIERS INVOLVED IN NT OPNS EXPERIMENTATN AND PROVIDES RAPID FEEDBACK FOR MIL USERS. 4 MANNED SYSTEMS RSCH IMPRVS TOTAL SYSTEMS PERFORMANCE AS RELATES TO HUMAN PERFORMANCE--GROUPS OF JOBS. AUTOMATED INFO SYST LAB PROVIDES HIGHLY FLEX AND FUNCTIONAL ACTIVITY FOR RSCH IN SURVEILLANCE, COMMAND AND INTELL SYSTEMS. VARIOUS CONFGS OF SYST COMPONENTS MAKE POSSIBLE INTERACTIONS AND TRADE OFFS

INSTALLATION BIOLOGICAL LABS., FT. DETRICK, MD.

C.O. COL FLOYD B. MITMAN ACTG. SCIENTIFIC DIR. DR. HAROLD N. GLASSMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	18.547	18.677
TOTAL PROCUREMENT	0.073	0.007
TOTAL O+M	1.152	1.166
TOTAL OTHER	1.063	0.896
TOTAL ANNUAL LAB	20.835	12.746
TOTAL INHOUSE	20.713	12.746
TOTAL INHOUSE RDT+E	18.425	18.677
ANNUAL OPERATING COST	6.646	6.352

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	77	5	33	44
CIVILIAN	210	23	92	118
TOTAL	287	28	125	162

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1220	1023.267	101.878	913.832	2038.977	72.562	18.423

...MISSION

CONDUCT A PROGRAM OF BASIC RSCH IN LIFE SCIENCES  
ANALYZE THREAT OF ENEMY USE OF BW TO INCLUDE EVAL OF INTELL RELATED TO  
BW DEV AND EVAL MATERIEL FOR NON-MED ASPECTS OF DEFENSE AGAINST BW  
EVAL BW POTENTIAL OF SEL BIO AGENTS IN TERMS OF THREATS TO US

...CURRENT IMPORTANT PROGRAMS

BASIC RSCH IN MICRO GENETICS TISSUE CUL PATHOGENICITY AERO INFEC AND  
IMMUNOLOGY STUDIES ON EPIDEM AND ECOLOG CONSEQ OF BW ATTACKS STUDIES ON  
BIOL BIOCHEM AND AERO BIOL PROPERTIS OF POTENTIAL BW AGENTS  
THREAT ANALYSIS TO DETERMINE VULNERABILITY OF US TO BIO ATTACK  
DEVELOPMENT OF BIO DETECTION AND WARNING DEVICES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

EQUIP FOR MICRO-BIO, AERO-BIO MED AND PROC RSCH ON HIGHLY INFEC AND PATH  
MICRO BLDGS DIV INTO POTEN CONTAM AND NON-CONTAM BIO CAB AIR LOCKS CHG  
RNS SHOW STERIL PASS BOX MSP LAB EQUIP LG AND SM FERMT AERC CHMBR SUN  
LIGHT LAB COLDRMS VENT AIR IN PATH LABS FLOWS FRM CLN TO PCT CONTAM  
AREAS NOT RECIR PAIR AND GAS FRM BIO SAF CAB TEST CHMBR EXPOS AN RMS  
HEAT STERIL PRIOR TO DISCH EQUIP TO STERIL CONTAM LIQ WASTE AND INCIN  
CONTAM SOLID WASTE. CHEM TYPE LABS. MOD AN HOLD FAC AND LG AN FAC  
FOR PROD OF NON PATH MAT. EXT SHOPS AND CONTAM LAUNDRY. ADP FAC.  
LG TECH LIBRARY.

INSTALLATION COATING AND CHEMICAL LAB., ABERCEEN PROVING GROUND, MD  
 C.O. COL RUDOLPH A. AXELSON ACTING DIR. HARRY L. AMMLUNG

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1971		1972	
	(ACTUAL)	(ACT + EST)	(ACT + EST)	(ACT + EST)
TOTAL RDT+E	2.591	2.432	0.130	0.130
TOTAL PROCUREMENT	0.130	0.080	0.105	0.080
TOTAL O+M	0.001	0.010	0.001	0.010
TOTAL OTHER	2.827	2.652		
TOTAL ANNUAL LAB				
TOTAL INHOUSE	1.412	1.613		
TOTAL INHOUSE RDT+E	1.215	1.438		
ANNUAL OPERATING COST	0.141	0.141		

PERSONNEL DATA (END OF FY 1971)

PERSONNEL	PERSONNEL DATA AUTHORIZED STRENGTH	TOTAL		NON-PROF
		PHD'S	PRCF	
MILITARY	5	1	6	0
CIVILIAN	44	2	24	20
TOTAL	49	3	30	20

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1	16.385	1.868	4.508	22.761	0.501	0.642

...MISSION  
 MANAGE + DIRECT THE ASSIGNED PORTION OF AMC MAT + FUELS + LUBES PROGRAM  
 INCLUDES BASIC + APPLIED RESEARCH IN AUTO CHEMICALS, ORGANIC + SEMI OR-  
 GANIC COATINGS, PAINT CLEANING FUELS + LUBES. COORDINATE THE RESEARCH  
 PROGRAM OF AMC IN THE FIELD OF FUELS + LUBES + RELATED MATERIALS

...CURRENT IMPORTANT PROGRAMS  
 DEVELOPMENT OF FULLY COORDINATED FED SPEC FOR LOW LEAD AUTO GASOLINES  
 DEFINING PERFORMANCE CHARACTERISTICS OF MULTI VISCOSITY ENGINE LUBS  
 COATINGS TO IMPROVE PROTECTION AND OPERATIONAL RELIABILITY OF MATERIAL  
 FUNCTIONAL CLEANING COMPOUNDS AND PAINT REMOVERS  
 INCREASE THE STABILITY OF ANTIFREEZE CORROSION INHIBITOR

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 SPECTROPHOTOMETERS  
 ACCELERATED WEATHERING MACHINE  
 CORROSION TEST CABINETS  
 GAS CHROMATOGRAPHS  
 PROGRAMED HUMIDITY CHAMBERS  
 FUEL COKER  
 SUB ZERO TEST CABINET  
 BRAKE FLUID STROKING UNIT  
 TEMPERATURE FLOW CORROSION UNIT  
 SPRAY BOOTH  
 AUTOMATIC VAPOR/LIQUID ANALYZER  
 TWO GENERAL PURPOSE LABORATORY BUILDINGS AND EXPOSURE FARM

INSTALLATION      COLD REGIONS RSCH + ENGR LAB, HANOVER, N. H.  
 C.O + DIR. LTC JOSEPH F. CASTRO

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	5.502	5.517
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.266	0.170
TOTAL OTHER	0.498	0.468
TOTAL ANNUAL LAB	6.266	6.155
TOTAL INHOUSE	5.398	5.258
TOTAL INHOUSE RDT+E	4.695	4.429
ANNUAL OPERATING COST	1.250	1.400

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	41	4	61		0
CIVILIAN	218	21	80		138
TOTAL	259	25	141		138

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
631	19.013	9.848	108.415	137.276		3.906	4.133

...MISSION

AS THE ARMY LABORATORY FOR SCIENCE AND TECHNOLOGY IN COLD REGIONS USACRREL CONDUCTS AND COORDINATES RESEARCH AND SURVEILLANCE OF TECHNOLOGY APPLICABLE TO THE ARMY'S NEEDS IN THOSE GEOGRAPHIC AREAS OF THE WORLD WHERE COLD PRESENTS A SEVERE PROBLEM AT LEAST ONE YEAR IN TEN

...CURRENT IMPORTANT PROGRAMS

ENGINEERING CRITERIA FOR DESIGN AND CONSTRUCTION IN COLD REGIONS  
 COLD REGIONS RESEARCH FOR MILITARY PURPOSES  
 ARCTIC SURFACE EFFECTS VEHICLE PROGRAM  
 DEVELOPMENT OF TECHNICAL AND FIELD MANUALS CONCERNING COLD REGIONS  
 INTERNATIONAL BIOLOGICAL PROGRAM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

THE MAIN LABORATORY AT USACRREL CONTAINS 24 COLDLABS WHICH CAN BE OPERATED TO -580F, SPECIAL TESTING APPARATUS FOR FROZEN MATERIALS, A CHEMICAL LAB, AN ELECTRON MICROSCOPE LAB, A ROCK MECHANICS LAB, AND SOILS PROCESSING LAB. FIELD WORK SUPPORT IN ALASKA IS PROVIDED BY A FIELD STATION AT FAIRBANKS. REPRESENTATIVE AREAS OF COMPETENCE AMONG USACRRELS SCIENTISTS AND ENGINEERS INCLUDE BIOLOGY BIOCHEMISTRY METEOROLOGY CHEMICAL ENGINEERING CIVIL ENGINEERING MARINE ENGINEERING MECHANICAL ENGINEERING GEOLOGY SANITARY ENGINEERING ELECTRONICS ELECTRICAL ENGINEERING PHYSICS CHEMISTRY HYDROLOGY GEOPHYSICS

INSTALLATION            COMBAT SURVEILLANCE GROUP,            FT. MONMOUTH, NJ.  
 C.O. AND DIR. COL JAMES H. DAVIS    DEPUTY DIR. HERBERT GOLDWAG

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	9.370	18.505
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	9.370	18.505
TOTAL INHOUSE	1.095	5.955
TOTAL INHOUSE RDT+E	1.095	5.955
ANNUAL OPERATING COST	0.400	3.100

PERSONNEL DATA (END OF FY 1971)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	67	2	16	51
CIVILIAN	283	6	183	100
TOTAL	350	8	199	151

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP    EQUIP
71	95.870	7.281	18.468	121.619	2.418    15.773

...MISSION

R+D OF EQUIPMENTS FOR COMBAT SURVEILLANCE, TARGET ACQUISITION, IDENTIFICATION-FRIEND-OR-FOE, RADIOLOGICAL SURVEY. APPLY FOLLOWING TECHNOLOGIES- RADAR, I-R, LIGHT, SOUND, SEISMICS, NUCLEONICS, ELECTRO-OPTICS, PHOTOGRAPHY, GEOPHYSICS, IMAGE INTERPRETATION, DATA TRANSFER AND DRONES

...CURRENT IMPORTANT PROGRAMS

ADV DEV AND SUPPORTING TECHNOLOGY FOR ARTILLERY LOCATING RADAR AN/MPQ-ENGR DEV OF MOBILE, HELI-LIFTED, MORTAR-LOCATING RADAR AN/TPC-36  
 ENGR DEV + LIM PRODUCTION OF MOVING-TARGET LOCATING RADAR SET AN/TPS-58  
 ENGR DEV OF LASER DESIGNATOR TRACKER SYSTEM LCTS AN/VAS-8  
 REMOTELY MONITORED BATTLEFIELD SENSOR SYSTEM REMBASS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PHOTO PROCESSING, OPTICAL TEST, LENS RESOLUTION TEST PATTERN FACILITIES  
 FAC INCL DARK ROOMS, CHEM LABS. RADAR TECHNIQUES DEV FAC INCL MICROWAVE DARK ROOM, ANTENNA PATTERN + TEST RANGE, 65FT HIGH RADAR TEST PLATFORM FIVE OUTDOOR + ONE INDOOR RANGES INSTRUMENTED FROM 30 MC TO 70 GS PER SEC. MOBILE SPECTRAL AND TIME-DISTRIBUTION MEASUREMENT FAC GOOD FROM 2900 A TO INTERMEDIATE IR. OPTICS FACILITY FOR MEASURING DETECTIVITY OF ELEMENTS, OUTPUT OF SOURCES, TRANSMISSION CHARACTERISTICS. LASER TEST + MEASUREMENT FAC FOR LASER SYSTEM COMPONENTS. RADAR INSTRUMENTATION FAC CAPABLE OF TRACKING X-BAND RADAR AND COLLECTING AND RECORDING POSITION, VELOCITY, AND SIGNAL STRENGTH HAS S-BAND SHORT-RANGE SEARCH CAPABILITY

INSTALLATION COMMUNICATIONS + ADP LAB. FORT MONMOUTH, N.J.

C.O. AND DIR. COL JOHN D. MITCHELL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	30.784	19.227
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.305	0.272
TOTAL ANNUAL LAB	31.089	18.499
TOTAL INHOUSE	15.307	12.818
TOTAL INHOUSE RDT+E	15.002	12.546
ANNUAL OPERATING COST	3.457	3.664

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	33	0	21	12
CIVILIAN	355	7	245	110
TOTAL	388	7	266	122

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
12	75.305	7.389	1.015	83.709	2.000	6.987

...MISSION

TO PERFORM R+D ACTIVITIES RELATED TO COMMUNICATIONS + ADP EQUIPMENTS AND SYSTEMS WHICH INCLUDE THE FIELDS OF RADIO, TELEPHONIC, TELEGRAPHIC AND FACSIMILE COMMUNICATIONS ADP TECHNIQUES + DATA STORAGE COMMUNICATION SECURITY ELECTROMAGNETIC COMPATIBILITY AND COMMUNICATING PROCESSES.

...CURRENT IMPORTANT PROGRAMS

TACTICAL RADIO COMMUNICATIONS SYSTEM TRCS  
 RADIO SET AN/PRC-70  
 AACOMS AN/TSQ-85, AN/TTC-38, AN/UGC-76  
 ARTADS TACFIRE, TOS  
 ULTRA RELIABLE RADIO

...FUNCTIONS/EQUIPMENT/CAPABILITIES

LAB SPACES, TEST INSTRUMENTS + SPECIALIZED ELECTRONIC, MECHANICAL AND OPTICAL EQUIPMENT TO PERFORM DESIGN, FABRICATION + TESTING OF ELECTRONIC CIRCUITS/COMPONENTS/EQUIPMENTS IN DISPLAY, PRINTING, SPEECH, NARROW AND WIDE BAND RADIOS FROM LOW TO LIGHT FREQUENCY RANGE, CONVENTIONAL AND ADVANCED MULTIPLEXING, SWITCHING, ERROR DETECTION + CODING, ANTENNA AND PROPAGATION TECHNOLOGIES SMALL SCALE COMPUTERS TO TEST + EVALUATE ADVANCED COMPUTER CONCEPTS + SUBSYSTEM/SYSTEM SOFTWARE + HARDWARE FIXED + MOBILE TACTICAL RADIO/MODEM/MULTIPLEXING/SWITCHING EQUIPMENTS TO SIMULATE FIELD CONFIGURATIONS FOR TEST, DATA COLLECTION + EVALUATION OF EXISTING EQUIPMENT/PROPAGATION/INTERFACE PROBLEMS ANTENNA TEST FACILITY + SHIELDED ROOMS FOR MEASURING OF + ESTABLISHING DOD STANDARDS FOR ELECTROMAGNETIC COMPATIBILITY, RADIATION + PROPAGATION.

INSTALLATION CONSTRUCTION ENGR. RESEARCH LAB., URBANA, ILL.

DIR. COL E.S. TOWNSLEY DEPUTY DIR. L.R. SHAFFER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	3.484	4.065
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.544	0.380
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	4.028	4.445
TOTAL INHOUSE	3.533	3.594
TOTAL INHOUSE RDT+E	3.029	3.249
ANNUAL OPERATING COST	1.030	1.070

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON- PROF
MILITARY	3	2	12	0
CIVILIAN	141	19	63	78
TOTAL	144	21	75	78

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
15	68.875	32.075	0.000	100.950	3.481	1.795

#### ...MISSION

TO PLAN, EXECUTE AND EVALUATE RESEARCH TO OBTAIN THE BEST COMBINATION OF ENGINEERING, DESIGN, CONSTRUCTION, MAINTENANCE AND OPERATION TO PROVIDE FACILITIES FOR THE MILITARY ESTABLISHMENT AND OTHER AGENCIES AND TO DISSEMINATE THE RESEARCH RESULTS

#### ...CURRENT IMPORTANT PROGRAMS

DEVELOPMENT OF MATERIALS FOR PERMANENT MILITARY CONSTRUCTION  
DEVELOPMENT OF IMPROVED DESIGN, CONSTRUCTION AND MANAGEMENT TECHNIQUES  
DEVELOPMENT OF MILITARY HOUSING SYSTEMS  
INDUSTRIALIZED BUILDINGS STUDY FOR MILITARY CONSTRUCTION APPLICATIONS  
DEVELOPMENT OF PAVEMENT MANAGEMENT SYSTEMS FOR AIRFIELD PAVEMENTS

#### ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONTROLLED ENVIRONMENT CHAMBER, 1000K CLOSED-LOOP MATERIALS TEST SYSTEM, 500K UNIVERSAL TESTING MACHINE, 10MW RESISTANCE LOAD BANK AND INSTRUMENTATION, X-RAY EQUIPMENT, DYNAMIC TENSION ANALYSIS EQUIPMENT SYSTEM, SEMI AUTOMATIC WELDING EQUIPMENT, DIGITAL RECORDING AND ANALYSIS EQUIPMENT  
NON-DESTRUCTIVE TESTING FACILITY, VACUUM INDUCTION MELTING EQUIPMENT, METALLOGRAPHIC SAMPLE PREPARATION AND RESEARCH METALLOGRAPHY, TEST AND EVALUATION EQUIPMENT FOR MEASUREMENTS OF PRESSURE, VELOCITY, LINEAR AND ANGULAR DISPLACEMENT AND VIBRATION AMPLITUDE AND FREQUENCY.  
FACILITIES CAPABILITIES INCLUDE SYSTEMS BUILDINGS METHODS, PAVEMENT SYSTEMS MODELLING, COMPUTER BASED DESIGN AND CONSTRUCTION MANAGEMENT TECHNIQUES, UTILITY SYSTEM DESIGN TECHNIQUES, HARDENED FACILITIES ANALYSIS, ENVIRONMENTAL QUALITY MANAGEMENT, POLLUTION STUDY AND MILITARY HOUSING

INSTALLATION DESERET TEST CENTER(LABS) DUGWAY, UTAH

C.O. BRIG GEN MAX ETKIN CHIEF SCIENTIST MORTIMER A. ROTHENBERG

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	15.636	13.355
TOTAL PROCUREMENT	0.285	0.450
TOTAL O+M	0.854	0.890
TOTAL OTHER	3.016	3.114
TOTAL ANNUAL LAB	19.791	17.809
TOTAL INHOUSE	18.070	16.529
TOTAL INHOUSE RDT+E	13.915	12.075
ANNUAL OPERATING COST	4.953	4.404

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	460	6	72	388	
CIVILIAN	1099	14	137	962	
TOTAL	1559	20	209	1350	

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
846302	200.463	139.594	330.395	670.452	68.969	19.406

...MISSION

PLAN+CONDUCT TESTS TO ASSESS MIL VALUE OF CHEM WPNS+CHEM BIO DEFENSE SYS  
PLAN+CONDUCT TESTS TO SUPPORT RESEARCH AND DEVELOPMENT  
INVESTIGATE CB TECH METEOROLOGY ECOLOGY AND EPIDEMIOLOGY  
PROVIDE BASIS FOR DEV OF NEW OPER AND LOG CONCEPTS FOR EMPL OF NEW SYS

...CURRENT IMPORTANT PROGRAMS

TEST TECH BINARY G AGENT SYSTEMS  
TEST TECH CHEMICAL INCAPACITATING AGENT SYSTEMS  
HIGH ALTITUDE DIFFUSION STUDIES  
BIOLOGICAL PERSISTENCY + SECONDARY AEROSOL SAMPLING METHODOLOGY  
U + G AGENT PERSISTENCY METHODOLOGY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TEST TECH BINARY SYSTEMS CAPACITY  
TEST TECH INCAPACITATING AGENTS  
TEST TECH RIOT CONTROL AGENTS  
BIOLOGICAL THREAT EVALUATIONS  
DECONTAMINATION PROCEDURES C/B TECHNOLOGY  
DETECTION RAPID WARNING SYSTEMS EVALUATION  
ENVIRONMENTAL TEST CAPACITY  
PHYSICAL TEST CAPABILITY FOR DEVELOPED WEAPON SYSTEMS  
DEFENSIVE EXPOSURE CHAMBER-HUMIDITY TEMPERATURE CONTROLLED  
VEHICULAR ACQUISITION TRACKING SYSTEM  
GRIDS FOR LARGE SCALE C/B TEST CAPACITY  
AUTO DATA ACQUISITION SYS FOR METEOROLOGICAL PARAMETER MEASUREMENTS

INSTALLATION DEVELOPMENT AND PROOF SERVICES, APG, MD.

C.O. COL WARREN D. HODGES TECH. DIR. F.P. WITT

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	9.063	9.300
TOTAL PROCUREMENT	16.123	16.580
TOTAL O+M	1.012	1.057
TOTAL OTHER	0.723	1.396
TOTAL ANNUAL LAB	26.921	28.333
TOTAL INHOUSE	26.660	28.157
TOTAL INHOUSE RDT+E	9.007	9.230
ANNUAL OPERATING COST	6.125	6.897

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	
MILITARY	232	2	79	153
CIVILIAN	1131	2	153	938
TOTAL	1363	4	272	1091

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
68700	84.400	78.800	916.800	1080.000	47.000	31.000

...MISSION

PLAN CONDUCT + REPT RESULTS OF ENGR + OTHER TESTS OF WPNS WPNS SYS FIRE  
CON SURV + TGT ACQ EQUIP ITEMS OF AMMO + MUN COMPONENTS CBT VEH OTHER  
AUTMV MAT GEN EQUIP SUCH AS GENERATORS + AIR CONDS + OTHER MAT AS ASGD  
PROC + CON ISS OF ARMOR PLATE FOR TESTS BY USAMC INSTLS + ACTIVITIES

...CURRENT IMPORTANT PROGRAMS

INVEST OF INBORE PREMATURE 175MM GUN WITH M437 PROJ  
PROJECTILE DESIGN FOR 152MM APFSDS  
ENGR TEST OF M60A1E2 TANKS  
ENGR DEV TEST OF ARMOR FOR XM706 ARMORED CAR  
ENGR DESIGN OF IMP UNIVERSAL MECH TIME FUZES MTSQ XM577 + XM582E1

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN DIR + CON AN R+D PROG FOR TEST INSTR TEST FAC + TEST METHODOLOGY TO  
SPT CURR + FUTURE RQMTS IN ASGD MSN AREA DESIGN DEV + PROC BALLISTIC +  
OTHER TEST INSTR RQRD BY TEST PLAN CHANGES IN TEST METHODOLOGY OR IM-  
PROVE OP EFF TEST AREA 68700 ACRES RANGE TO LAND IMPACT 26000 M RANGE TO  
WATER IMPACT 30000 M 41 M1 OF AUTMV CRS INCL 27 SP ENGR TEST CRS + OB-  
STACLES VARIETY OF ENVIRON OR COND EQUIP SP CHAMBERS FOR SUBJ EQUIP TO  
DUST SALT SPRAY OR SOLAR RADN ISOLATED VIBRATION TEST FAC WHICH PERMITS  
SHAKING EXPLO EQUIP SIMULTANEOUSLY WITH TEMP CONDITICKING FAC FOR CON  
TESTS OF ELEC CON + GUID EQUIP HIGH FREQUENCY SOURCE WHICH PERMITS TEST-  
ING ALL TYPES OF MAT IN PRESENCE OF A HIGH INTENSITY ELEC MAGNETIC RADN  
IS AVAIL SP FAC FOR TEST OF ARMOR PLATE SP VEL + TGT EQUIP IS AVAIL FOR  
OBSNS DURING RAPID FIRE AS IS A RKT TRACK FOR CON TML BALLISTIC TESTS

INSTALLATION            EDGEWOOD ARSENAL LABS., EDGEWOOD ARSENAL, MD

C.O. COL JOHN K. STONER, JR.      TECH. DIR. DR. B.L. HARRIS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	29.504	25.513
TOTAL PROCUREMENT	5.953	5.458
TOTAL O+M	4.153	3.647
TOTAL OTHER	2.334	2.321
TOTAL ANNUAL LAB	41.944	36.939
TOTAL INHOUSE	37.490	35.861
TOTAL INHOUSE RDT+E	25.050	24.435
ANNUAL OPERATING COST	15.403	19.428

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	208	54	139	69	
CIVILIAN	1322	62	538	784	
TOTAL	1530	116	677	853	

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
4055	679.877	122.839	103.630	906.346	19.540	10.500

...MISSION

CLASS II ACTIVITY CONDUCTING A RESEARCH AND DEVELOPMENT MISSION FOR ARMY CHEMICAL MUNITIONS AND DEFENSIVE ITEMS. INCLUDES BASIC RESEARCH AND GENERAL INVESTIGATIONS AS WELL AS EXPLORATORY, ADVANCED AND ENGINEERING DEVELOPMENT OF MATERIAL.

...CURRENT IMPORTANT PROGRAMS

PROPHYLAXIS AGAINST AND TREATMENT OF CHEMICAL AGENT CASUALTIES  
CHEMICAL AGENT ALARM TECHNIQUES  
PHYSICAL PROTECTION AGAINST CHEMICAL ATTACK  
DEVELOPMENT OF BINARY CHEMICAL AGENTS MUNITIONS SYSTEMS  
DEVELOPMENT OF MODULAR COLLECTIVE PROTECTION EQUIPMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT DOD RSCH OF ANTIPERS CML AGTS/TOXICOLOGY-PHYSIOLOGY + PHARM OF CML COMPOUNDS + ANTIPERS-ANTIMAT FLAME-INCEND AGTS/DA RSCH OF DEFENSE AGAINST CML ATTACK + DISSEM-DISPERSION OF CML MUNITIONS/AERODYNAMICS RSCH/INVEST SIMULANTS + TRNG AGTS/DEV CML AGT PROCESS-TEST + ASSESS TECHNOLOGY/DEV CIVIL DISTURB-RIOT CONTROL SYS/DEV PROTECTIVE EQUIP + WARNING-DETECTION MAT FOR DEFENSE AGAINST CML ATTACK + DEV CML AGENT MUNITIONS SYSTEMS.  
MAJOR EQUIP IS CONTAINED IN A COMPLEX OF ENGR + LAB AREAS + INCLUDES CML PILOT PLTS-MUN FILLING-ENGR DESIGN + EXP FAB SHOPS AERSOL DISSEM TEST CHAMBERS PYROTECH MISING-LOADING + HANDLING FAC INDCOR BALLISTIC RANGE SUBSONIC-SUPERSONIC + TRANSONIC WIND TUNNELS A COMPLETE CLINICAL RESEARCH FACILITY + AN ANIMAL BREEDING + HOLDING FACILITY.

INSTALLATION ELECTRONICS PROVING GROUND, FT. HUACHUCA, ARIZ

C.O. COL WALLACE G. ENDERLE CHIEF SCIENTIST DR. GEORGE E. SHAFER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	8.717	8.400
TOTAL PROCUREMENT	2.403	1.382
TOTAL O+M	0.016	0.016
TOTAL OTHER	2.999	2.767
TOTAL ANNUAL LAB	14.135	12.573
TOTAL INHOUSE	10.551	9.000
TOTAL INHOUSE RDT+E	5.470	5.270
ANNUAL OPERATING COST	2.241	2.263

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	449	0	124	325
CIVILIAN	260	1	69	191
TOTAL	709	1	193	516

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
9231	0.000	174.526	0.000	174.526	4.989	34.100

...MISSION

OP USAEPG INCL ELECTROMAGNETIC ENVIRONMENTAL ECM VULNERABILITY + SYS  
TEST FAC. PLAN CDT EVAL + REPORT ON ET OF COMTEL + AVIONICS EQUIP + SVC  
TEST ON DIV COMTEL EQUIP. PROV TECH + LOG CONSULTATION SVC TO OTHER DCD  
AGENCIES ON TEST + EVAL ACTIVITIES, IN-PROCESS REVIEWS, SPEC COORD.

...CURRENT IMPORTANT PROGRAMS

METHODS OF MEASURING REFRACTIVITY ERROR.  
AUTOMATIC TEST EQUIPMENT FOR COMMUNICATIONS ELECTRONICS.  
INFRARED SYSTEM SENSITIVITY STUDY FOR 1972-80.  
INFRARED OPTICAL EVALUATION DATA CONTROL SYSTEM.  
INFRARED OPTICAL PROPAGATION STUDY.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN, CONDUCT, AND REPORT ON ENGINEERING TESTS, CHECK TESTS, INITIAL  
PRODUCTION TESTS, APPROPRIATE PREPRODUCTION TESTS, AND ASSIGNED SERVICE  
TESTS. PLAN, CONDUCT, AND REPORT ON EMC AND ECM TEST ANALYSES AS APPLIED  
TO COMMUNICATIONS-ELECTRONICS EQUIPMENT/SYSTEMS. OPERATE THE US ARMY  
ELECTRONIC PROVING GROUND TO INCLUDE AN ELECTROMAGNETIC ENVIRONMENTAL  
TEST FACILITY, A SPECTRUM SIGNATURE COLLECTION FACILITY, AND A SYSTEM  
TEST FACILITY. PROVIDE ADVICE TO PROPONENT AGENCIES AND MATERIEL  
DEVELOPERS DURING THEIR DEVELOPMENT OF MATERIEL. CONDUCT OTHER TESTS AND  
EVALUATIONS AS DIRECTED BY THE COMMANDING GENERAL, USATECOM.

INSTALLATION ELECTRONIC TECHNOLOGY + DEVICES LAB, FT MONMOUTH, N.J.

DIR. DR. HANS K. ZIEGLER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	25.733	12.550
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.179	0.172
TOTAL ANNUAL LAB	25.903	12.720
TOTAL INHOUSE	14.008	8.916
TOTAL INHOUSE RDT+E	13.838	8.746
ANNUAL OPERATING COST	4.312	4.312

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	17	9	14	3
CIVILIAN	452	52	303	149
TOTAL	469	61	317	152

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
247	163.096	4.080	4.500	171.676	5.832	11.412

...MISSION

PLAN AND CONDUCT EXPLORATORY R AND D OF ELECTRONIC MATERIALS PARTS AND DEVICES ASSEMBLIES AND RELATED DISCIPLINES AND TECHNIQUES APPLICABLE TO EQUIPMENTS AND SYSTEMS. CONDUCTS RESEARCH IN THE PREPARATION COMPOSITION, STRUCTURE AND PROPERTIES OF ELECTRONIC MATERIALS AND RELATED PHENOMENA

...CURRENT IMPORTANT PROGRAMS

RESEARCH IN ELECTRONICS, PHYSICS, CHEMISTRY, MATHEMATICS, AND NUCLEAR PHYSICS  
 R AND D OF ELECTRONIC DEVICES, MATERIALS, TECHNIQUES AND ASSEMBLIES  
 R AND D OF BATTERIES, CHARGERS, POWER CONDITIONING, THERMAL ENERGY FUELCELL  
 R AND D OF INTEGRATED ELECTRONICS FOR COMBAT EQUIPMENT  
 R AND D OF GENERAL PURPOSE TEST EQUIPMENT FOR ELECTRONIC SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FACILITIES ARE AVAILABLE FOR PERFORMING EXPLORATORY RESEARCH IN PHYSICS AND CHEMISTRY OF MATERIALS AND FOR CONDUCTING R AND D OF ELECTRONIC PARTS DEVICES AND ASSEMBLIES. LABORATORIES FOR PERFORMING R AND D IN THESE AREAS ARE EQUIPPED WITH THE NORMAL COMPLEMENT OF STANDARD LAB INSTRUMENTATION AND FACILITIES. WORK AREAS INCLUDE FACILITIES FOR DESIGNING, FABRICATING AND TESTING INTEGRATED CIRCUITS, VARIETIES OF SEMICONDUCTOR DEVICES, ELECTRON TUBES AND PIEZOELECTRIC OR ATOMIC FREQUENCY CONTROL DEVICES. FACILITIES ARE AVAILABLE FOR SIMULATION AND MEASUREMENT OF LOW AND HIGH POWER LASER PROPAGATION, NUCLEAR EFFECTS, AND FOR THE FABRICATION OF DISPLAY, STORAGE AND PICKUP DEVICES. ALSO FOR R AND D IN POWER SOURCES AND FOR ELECTRONIC MATERIAL CHARACTERIZATION. WORLD WIDE TRACKING STATIONS ARE AVAILABLE FOR STUDYING EFFECTS OF SOLAR RAD. AND IONOSPHERIC PHEN. ON EM PROPAGATION

INSTALLATION ELECTRONIC WARFARE LAB, FT MONMOUTH, N.J.

C.O. AND DIR. COL JAS D. DONNELLY DEPUTY DIR. C.K. SHULTES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.600	21.657
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.304
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	0.600	21.961
TOTAL INHOUSE	0.600	13.310
TOTAL INHOUSE RDT+E	0.600	13.014
ANNUAL OPERATING COST	3.463	4.213

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	89	1	16	73
CIVILIAN	328	2	176	152
TOTAL	417	3	192	225

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	31.576	57.853	19.771	109.197	1.200	34.165

...MISSION

ECOM R+D ESSENTIAL TO ELECTRONIC WARFARE + SELECTED AREAS OF INTELL.  
ENCOMPASSES APPLD R+D INCL QRC DEV + SPT IN INTERCEPT, DF, SIG ANALY,  
JAMMING, DECEPT, SIG INTELL, ACOUST INTELL, AGENT EQUIP, SECURITY, CNTR INTEL,  
VULNERABILITY + COUNTER COUNTERMEASURES.

...CURRENT IMPORTANT PROGRAMS

EMITTER LOCATION + IDENTIFICATION ASSEMBLIES AIRBORNE .  
PROTECTION OF ARMY ACFT AGAINST IR MISSILES.  
GROUND MOBILE NON-COMM COLLECTION ASSEMBLIES.  
MISSILE ELECTRONIC WARFARE.  
TECHNICAL SURVEILLANCE AIDS + COUNTERMEASURES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ECM EQUIP + DEVICE R+D FACILITY, MISSILE EW, DF TEST FACILITY. MAJOR EQUIP  
VT FUZE SIMULATOR, LASERS, RTMS, ABN ECM LABS, IR TEST RANGE, ECM TEST RANGE,  
ANECHOIC CHAMBER, ANTENNA PATTERN RANGE, 2 MHz-40 GHz. CAPABILITIES  
CONCEIVE, DESIGN, DEVELOP ECM AGAINST C-E EQUIP. CONCEIVE, DESIGN, DEVELOP  
NEW EW SYS FOR SIGINT, ELINT, COMINT, QRC APPLICATIONS. MEASURE VUL TO ECM  
OF ARMY GUIDED MISSILES. PROVIDE LINEAR, SQUARE ROOT LOG ANTENNA PATTERN  
PRESENTATIONS.

INSTALLATION ENGINEER TOPOGRAPHIC LAB., FT BELVOIR, VA.

C.O. COL JOHN E. WAGNER TECH. DIR. GILBERT G. LORENZ

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	10.853	12.856
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.160	0.223
TOTAL ANNUAL LAB	11.013	13.079
TOTAL INHOUSE	5.144	6.535
TOTAL INHOUSE RDT+E	4.984	6.312
ANNUAL OPERATING COST	0.490	0.550

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	15	1	16	0
CIVILIAN	239	13	137	102
TOTAL	254	14	153	102

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
0	47.304	9.980	2.660	59.944	0.000	9.358

...MISSION

PRINCIPAL FIELD ACTIVITY OF THE ARMY FOR ACCOMPLISHING RESEARCH AND DEVELOPMENT OF EQUIPMENT, PROCEDURES AND TECHNIQUES APPLICABLE TO THE TOPOGRAPHIC SCIENCES TO INCLUDE MAPPING, SURVEYING, GEODESY, PHOTO INTERPRETATION, AND MILITARY GEOGRAPHIC INFORMATION.

...CURRENT IMPORTANT PROGRAMS

DEVELOPMENT OF SEMI-AUTOMATIC CARTOGRAPHIC EQUIPMENT  
DEVELOPMENT OF AN ALL-WEATHER RADAR MAPPING SYSTEM  
DEVELOPMENT OF MILITARY GEOGRAPHIC INTELLIGENCE CONCEPTS AND SYSTEMS  
DEVELOPMENT OF A LONG RANGE POSITION DETERMINING SYSTEM  
DEVELOPMENT OF A POSITION AND AZIMUTH DETERMINING SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

THE US ARMY ENGINEER TOPOGRAPHIC LABORATORIES PERFORM BASIC AND APPLIED RESEARCH, AND EXPLORATORY, ADVANCED, AND ENGINEERING DEVELOPMENT PERTAINING TO TOPOGRAPHIC MAPPING, GEODESY, SURVEYING, GEOGRAPHY, PHOTO INTERPRETATION, AND MILITARY GEOGRAPHIC INTELLIGENCE. IT CARRIES OUT A PROGRAM WHICH CONSISTS OF BOTH INTERNAL AND CONTRACTUAL EFFORTS ADDRESSING THE FEASIBILITY OF CONCEPTS AS WELL AS THE FABRICATION OF PROTOTYPE AND ENGINEERING EQUIPMENT SATISFYING BOTH GENERAL AND SPECIFIC MILITARY FIELD AND BASE PLANT REQUIREMENTS.

INSTALLATION ENGINEER WATERWAYS EXPERIMENT STA., VICKSBURG, MISS.

DIR. COL ERNEST D. PEIXOTTO TECH. DIR. F.R. BROWN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	10.919	13.287
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.413	0.244
TOTAL OTHER	8.179	10.143
TOTAL ANNUAL LAB	19.511	23.674
TOTAL INHOUSE	18.722	21.381
TOTAL INHOUSE RDT+E	10.130	10.994
ANNUAL OPERATING COST	3.859	3.907

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	36	2	43		0
CIVILIAN	1188	33	323		865
TOTAL	1224	35	366		865

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1884	1379.000	383.554	230.046	1992.600	14.761	22.531

...MISSION

MIL+CIV FUNDED ENGR RSCH, DEV+INVES IN HYD, ECOLOGY, PERM+EXPEDIENT PAVEMENTS, SOIL, CONCRETE, EXPLO WPN EFF, EXPLO EXCAVATION, VEH MOBILITY+ENVIRONMENT ASPECTS OF MIL OP. CONSULTANT SVC+TECH LIBRARY. TECH SURVIL OF CEMENT AND POZZOLAN TEST PROG. SERVES CE, AMC, DNA, AEC, OCD, AF, NAVY+OTHER AGENCIES.

...CURRENT IMPORTANT PROGRAMS

HYD+MATH MODELING TO SOLVE RIVER, TIDAL, WIND-WAVE, ECOLOGICAL+STRUC PROBS. INVES MEANS OF ACQUIRING TERRAIN DATA BY USE OF VARIOUS SENSING DEVICES. NUC+HE RSCH TO DEV CRITERIA FOR ED OF PROTECTIVE STRUC BOTH UGND+UWTR. RSCH. DEV+FORMULATION OF NEW+IMP ENG CRITERIA ON ROADS, STORAGE AREAS, AIR-FIELDS+HELIPORTS. INVES OF CEMENTITIOUS MAT+RSCH OF MASS+STRUC CONCRETE.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CDT RDT+E FOR MANY SPONSORS, PERF GEN INVES IN FLD OF HYD, SOIL MECH, CONCRETE, MOBILITY OF MIL VEH, EXPLO EFF, ECOLOGY, EXPLO EXCAVATION+PAVEMENTS. THRU BA+APPLIED RSCH IN THESE +RLT FLD, THE DEV OF METHODS+TECHNIQUES AND THE TESTING OF MAT+EQUIP, ASST IN ACCOMPMT OF THE CIV WORKS+MIL MSN OF CE. WES RESERVATION CNTN BLDGS, TEST SITES, SPECL EQUIP+OTHER PLANT FAC. TEST SITES+FAC FOR SP PURPOSES ARE MAINT IN OTHER AREAS ON PERM OR TEMP BASIS. FAC INCL FLUMES OF DIFF TYPES+SIZES, WAVE+TIDE GENR MACH, DRILL EQUIP, FULLY EQUIPED SOILS LAB, X-RAY DIFFRACTION AND SPECTROSCOPY APPAR, FULLY EQUIPED CONCRETE LAB, LARGE+SMALL BLAST LOAD GENERATOR, 200K DYNAMIC LOADER, MOBILITY TEST CARTS, SINGLE+MULTIPLE WHEEL LOAD CARTS FOR TFC, SUR EFF BLAST FAC, HIGH+LOW FREQ VIBRATORS, ELECTRON MICROSCOPE, PHYS TREATMENT LAB, CALBR LAB, FLCT LAB, LARGE SCALE CMPT FAC+ A TECHNICAL LIBRARY.

INSTALLATION FRANKFORD ARSENAL LABS., PHILA., PA.

C.O. COL JAMES L. WALLACE TECH. DIR. DR. SIDNEY ROSS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	25.150	23.032
TOTAL PROCUREMENT	3.970	8.687
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.083	0.083
TOTAL ANNUAL LAB	29.203	31.802
TOTAL INHOUSE	21.307	26.093
TOTAL INHOUSE RDT+E	17.254	17.323
ANNUAL OPERATING COST	4.000	4.000

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	18	1	17	1
CIVILIAN	1567	29	691	876
TOTAL	1585	30	708	877

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
22	558.000	134.000	557.000	1249.000	0.970	9.025

...MISSION

COMMODITY CTR SMALL CAL AMMO + PROPELL ACT DEVICES + MULTIPURP TEST EQ  
RES IN OPTICAL MTL + NON-FERR METALS + MTL DEGRAD + MYCOLOGY + PWR  
TRANS FLUIDS + SYNTH LUBS + PROPELL EXPLOS PYROTECH + LASER COUNTERMEAS  
R+D TRACER AMMO DESIGN+DEVELOP ARTY METAL PARTS + MECH TIME FUZE

...CURRENT IMPORTANT PROGRAMS

ARMY SMALL CALIBER AMMUNITION RESEARCH AND ENGINEERING PROGRAM  
SMALL CALIBER AMMUNITION MODERNIZATION PROGRAM  
AIRCRAFT + ANTI-AIRCRAFT + ARTILLERY + COMBAT VEHICLE FIRE CONTROL  
TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT  
LASER COUNTERMEASURES AND PROTECTION RESEARCH AND EXPLORATORY DEVL

...FUNCTIONS/EQUIPMENT/CAPABILITIES

RAPID SCAN SPECTROPHOTOMETER PILOT PLANT TRACER LOADING FACILITY OPTICAL  
LAB + DESIGN FACILITY + SHOP LASER TEST FACILITY SOLID STATE PHYSICS LAB  
ELECTRON MICROSCOPE XTAL GROWING EQUIP ELECTRON BEAM VACUUM FILM DEPOSIT-  
TION EQUIP DYNAMIC PHOTOELASTIC STRESS ANALYSIS EQUIP HIGH SPEED PHOTO-  
GRAPHIC EQUIP SPACE + ATMOSPHERIC SIMULATOR UNIVAC 5590 COMPUTER HYDRAUL  
+ MECH POWDER MOLD EQUIP VAC-ARC MELTING FURNACES MICROSCAN X-RAY ANALY-  
ZER RADIO-ISOTOPE LAB MICROBIOLOGY LAB TROPICAL CLIMATE RM EPR SPECTRO-  
METER DIFF SCAN CALORIMETER PROPELLANT PROCESSING LAB SPECIAL EQUIP FOR  
IGNITION + PYROTECH R+D 15 FIRING RANGES HIGH EXPLOSIVES SITE 4 PADS FOR  
POINT FUZE DETONATION BALLISTIC MEAS EQUIP DOPPLER RADAR SPECTRA PHOTO-  
METER K-BAND MICROWAVE INTERFEROMETER MICROWAVE ANAECOTIC CHAMBER AUTO-  
MATIC CHECK-OUT EQUIP + LAB HOLOGRAPHIC EQUIP FLEXITRON FLASH X-RAY EQ

INSTALLATION GENERAL EQUIPMENT TEST ACTIVITY, FT. LEE, VA.

C.O. LTC DONALD W. ALBERTI TECH. ADV. DR. HOWARD W. HEMBREE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.259	1.122
TOTAL PROCUREMENT	0.377	0.229
TOTAL O+M	0.077	0.042
TOTAL OTHER	1.802	0.704
TOTAL ANNUAL LAB	4.515	2.097
TOTAL INHOUSE	4.498	2.097
TOTAL INHOUSE RDT+E	2.242	1.122
ANNUAL OPERATING COST	1.444	0.872

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	286	0	54	232
CIVILIAN	95	1	31	64
TOTAL	381	1	85	296

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
453	68.589	121.625	21.360	211.574	1.500	2.314

...MISSION

PLAN CONDUCT + REPORT ON SERVICE TESTS CHECK MP CF ED PI IP SS RE LOTS + MOVAD + OTHER TESTS. PROVIDE REQUIRED TEC + LOG CONSULTATION SVCS TO AMC OTHER TECOM COMDS DA + DD. PLAN DIRECT + CONTROL R+D PROGRAM FOR TEST INSTR FAC + METHODOLOGY TO SUPPORT CURRENT + FUTURE TEST REQUIREMENTS

...CURRENT IMPORTANT PROGRAMS

TESTING PROPELLING UNIT OUTBOARD DIESEL  
 TESTING FORWARD AREA REFUELING EQUIPMENT  
 TESTING BOAT LANDING INFLATABLE ASSAULT CRAFT 15-MAN  
 TESTING PILE DRIVING RIG SKI MOUNTED STEEL WITH MOONBEAM ASSEMBLY  
 TESTING TRUCK FORKLIFT ELECTRIC SOLID RUBBER TIRES 4000 POUND

...FUNCTIONS/EQUIPMENT/CAPABILITIES

COORDINATE PLAN CONDUCT + REPORT TESTING ACTIVITIES DIRECTED BY USATECOM IDENTIFY POTENTIAL MAINTENANCE PROBLEMS + DETERMINE COMPATIBILITY OF THE MAN-MACHINE SYSTEM + THE SAFETY OF ITEMS FOR USE BY THE ARMY. RECOMMEND AS APPROPRIATE SUITABILITY OF MATERIEL TESTED FOR TYPE CLASSIFICATION PROVIDE FOR ATTENDANCE AT IN-PROCESS REVIEW MEETINGS + OTHER CONF AS REQ FACILITIES INCLUDE EXPERIMENTAL KITCHEN + FOOD TEST FACILITIES DYNAMIC + STATIC RAIN COURSE SIX ACCELERATED WEAR COURSES MHE TEST TRACK HIGHWAY + RAIL TESTING FACILITIES TRANSPORTABILITY LINE HAUL + CARGO LOADING ADAPTABILITY TEST COURSE COMBAT EFFECTIVENESS TEST FACILITY POL STORAGE TANKS RADIOACTIVE MATERIALS STORAGE FACILITY ROUGH TERRAIN TEST COURSE FABRIC EXPOSURE SITE MECHANICAL ENGINEERING + POL EQUIPMENT TEST AREAS MARINE + PORT FACILITIES AT FT EUSTIS BEACH + OCEAN FRONT AT FT STORY

INSTALLATION HARRY DIAMOND LABS., WASH., D.C.

C.O. COL DAVID W. EINSEL, JR. TECH. DIR. BILLY M. HORTON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	26.298	41.978
TOTAL PROCUREMENT	25.915	16.588
TOTAL O+M	1.738	1.466
TOTAL OTHER	0.698	0.441
TOTAL ANNUAL LAB	54.649	60.385
TOTAL INHOUSE	28.996	26.750
TOTAL INHOUSE RDT+E	18.807	23.938
ANNUAL OPERATING COST	8.669	9.450

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	10	1	11	0
CIVILIAN	1362	42	481	881
TOTAL	1372	43	492	881

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB ADMIN	OF SQUARE FEET OTHER	TOTAL	REAL PROP	EQUIP	
2770	281.602	46.119	54.154	381.875	11.874	22.871

...MISSION

RD+E ON INFLUENCE+TIME+COMMAND FUZING+CCM/SIGNATURE ANALYSIS+TARGET INTERCEPTION/WEAPON SYSTEM SYNTHESIS/INSTRUMENTATION+MEASUREMENT+ SIMULATION OF MATERIALS+COMPONENTS/ADVANCED ENERGY TRANSFORMATION+ CONTROL/LEAD LAB FOR FLUIDICS/LEAD LAB FOR NUCLEAR WEAPONS EFFECTS\*

...CURRENT IMPORTANT PROGRAMS

DEV+ENG OF PERSONNEL DETECTION SIGNAL PROCESSORS+WEAPCNR RADAR\*  
DEV OF FLUIDIC STABILIZATION SYSTEMS FOR SMALL ARMS+LARGE WEAPONS\*  
ANALYSIS+MODELING+EXPLOITATION OF SELECTED FOREIGN ORNANCE\*  
RES+DEV OF HARDENED PROXIMITY FUZING FOR MISSILE REENTRY VEHICLES\*  
RD+E OF PROXIMITY+ELECTRONIC TIME FUZING FOR ARTILLERY+MORTARS+MINES\*

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN+MANAGE+CONDUCT PROGRAMS IN SUPPORT OF ASSIGN MISSIONS\*MANAGE FLUID TECHNOLOGY DEVELOPMENT\*PROVIDE CONSULTING SERVICES, TECHNICAL GUIDANCE+ ASSISTANCE TO AMC/OTHER ELEMENTS OF DA+DOD+OTHER GOVT AGENCIES\*MAINTAIN A HIGH DEGREE OF COMPETENCE IN THE APPLICATION OF PHYSICAL SCIENCES TO THE SOLUTION OF MILITARY PROBLEMS\*OPERATE+MAINTAIN SEVERAL HIGHLY SPECIALIZED FACILITIES EQUIPPED TO SUPPORT THESE FUNCTIONS INCLUDING FLASH XRAY+PULSE REACTOR FOR NUCL EFFECTS EVALUATIONS/ANECHOIC CHAMBER+ ANTENNA TEST RANGE FOR RADIO ANTENNAS/HIGH PRESSURE SHOCK TUBES FOR STDY OF HIGH TEMPERATURE GASES/MERCURY ARC PLASMA TUBE, OPTICAL+SPECTROSCOPIC EQUIPMENT/TEST RANGE FOR EXPERIMENTAL EVALUATION OF FUZES, COMPONENTS+ SUBSYSTEMS/LATITUDE MAGNETIC SIMULATOR FOR SIGNATURE ANALYSIS/TELEMETRY EQUIPMENT+AIR GUN FOR LABORATORY SIMULATION OF WEAPON FIRING FORCES\*

INSTALLATION HUMAN ENG. LABS., ABERDEEN PROVING GROUND, MD.  
 C.O. COL RUDOLPH A. AXELSON TECH. DIR. CR. JOHN D. WEISZ

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.944	3.372
TOTAL PROCUREMENT	0.053	0.000
TOTAL O+M	0.039	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	3.036	3.372
TOTAL INHOUSE	2.535	2.772
TOTAL INHOUSE RDT+E	2.443	2.772
ANNUAL OPERATING COST	0.434	0.463

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	33	1	24	9
CIVILIAN	93	10	51	42
TOTAL	126	11	75	51

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
10	26.500	17.605	24.658	68.763	1.513	3.210

...MISSION

CONDUCT BASIC AND APPLIED RESEARCH IN HUMAN FACTORS ENGINEERING  
 DEVELOP NEW HUMAN FACTORS ENGINEERING METHODOLOGY  
 ESTABLISH AND OPERATE A MANPOWER CHARACTERISTICS DATA BANK  
 INTEGRATE ALL MNPR CHARACTERISTICS INTO ARMY MATERIEL DEVELOPMENT PROG

...CURRENT IMPORTANT PROGRAMS

HUMAN ENGR LAB BATTALION ARTILLERY TESTS  
 HUMAN ENGR LAB ARMOR SYSTEM TESTS  
 HUMAN ENGR LAB HELICOPTER ARMAMENT TESTS  
 SMALL ARMS EXPERIMENTS  
 COMMAND CONTROL INFORMATION DISPLAY R AND C

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FIXED WING FLIGHT SIMULATORS  
 HELICOPTER SIMULATORS  
 COMMAND AND CONTROL INFORMATION HANDLING SIMULATORS  
 ANECHOIC CHAMBER  
 PHYSIOLOGY LABORATORY WITH INSTRUMENTATION  
 SMALL ARMS TEST FIRING RANGE  
 ANIMAL SURGICAL FACILITY  
 NOISE MEASUREMENT AND ANALYSIS INSTRUMENTATION  
 WOOD WORKING AND METAL WORKING SHOPS  
 CLOSED CIRCUIT TV INSTRUMENTATION  
 CENTRAL NERVOUS SYSTEM OUTPUT RECORDING INSTRUMENTATION  
 HUMAN PERFORMANCE DATA BANK

INSTALLATION INFANTRY BOARD, FT. BENNING, GA.

PRES. COL CHARLES B. THOMAS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.948	1.368
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.088	1.690
TOTAL ANNUAL LAB	2.036	3.058
TOTAL INHOUSE	1.883	2.946
TOTAL INHOUSE RDT+E	0.795	1.256
ANNUAL OPERATING COST	0.178	0.204

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	
MILITARY	160	0	13	147
CIVILIAN	51	0	0	51
TOTAL	211	0	13	198

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
0	0.000	47.383	28.576	75.959	2.592	0.388

...MISSION  
 PLAN CONDUCT + REPORT TESTS RELATED TO SUITABILITY OF EQUIP FOR ARMY USE  
 PERFORM CUSTOMER TESTS TO EXPEDITE DEVELOPMENT + PROCUREMENT TEST PROGS  
 CONTROL PROGRAM ON TEST METHODOLOGY INSTRUMENTATION AND FACILITIES  
 PROVIDE ADVICE TO DEVELOPERS DURING THEIR DEVELOPMENT OF INFANTRY EQUIP

...CURRENT IMPORTANT PROGRAMS  
 EXPANDED SERVICE TEST MEDIUM ANTITANK ASSAULT WEAPON XM47 DRAGON  
 STUDY TO IMPROVE TEST METHODOLOGY AND DEVELOP INSTR TEST FACILITIES  
 SERVICE TESTS OF NIGHT VISION SIGHTS SECOND GENERATION  
 ENGINEER-SERVICE TEST OF NIGHT SIGHT FOR XM47 DRAGON  
 SERVICE TEST OF LIGHTWEIGHT LOADCARRYING EQUIPMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 SERVICE TEST EQUIP + ANCILLARY ITEMS USED BY INF FOR FIRE POWER TARGET  
 ACQUISITION GROUND SURVEILLANCE FIRE CONTROL + GROUND MOBILITY FIELD  
 CLOTHING EQUIP + RATIONS AP MINES CB EQUIP FOR INDIVIDUALS + SMALL UNITS  
 AIRBORNE TEST OF EQUIP WORN OR CARRIED BY PARACHUTISTS WHILE JUMPING  
 PROVIDE REPRESENTATION FOR IN-PROCESS REVIEWS  
 ASSIST IN PREPARATION OF AND REVIEW MATERIEL NEEDS  
 PLAN DIRECT AND CONTROL PROGRAM IN TEST METHODOLOGY + INSTRUMENTATION  
 EVALUATE + MAKE RECOMMENDATIONS CONCERNING SUITABILITY AND SAFETY OF  
 TEST ITEMS FOR OPERATIONAL USE  
 KNOWN DISTANCE SMALL ARMS RANGE MORTAR RANGE + INSTRUMENTED ANTITANK  
 RANGE DEFENSE RANGE ATTACK RANGE + QUICK FIRE RANGE  
 CLIMATIC CHAMBER

INSTALLATION INST.OF DENTAL RSCH, WALTER REED AMC, WASH., D.C.

C.O. COL SURINDAR N. BHASKAR

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.525	0.599
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.058	0.061
TOTAL OTHER	0.539	0.635
TOTAL ANNUAL LAB	1.122	1.295
TOTAL INHOUSE	1.122	1.295
TOTAL INHOUSE RDT+E	0.525	0.599
ANNUAL OPERATING COST	0.233	0.117

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	57	3	48	9
CIVILIAN	25	1	24	1
TOTAL	82	4	72	10

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	7.711	4.722	1.724	14.157	0.000	0.675

...MISSION

CONDUCT RESEARCH IN ETIOLOGY, CONTROL AND PREVENTION OF ORAL DISEASE.  
DEVELOP SIMPLIFIED TECHNIQUES OF EFFECTIVE TREATMENT INCLUDING MAXILLO-  
FACIAL INJURIES. INVESTIGATE PROPERTIES AND USES OF DENTAL MATERIALS.  
CONDUCT DENTAL EDUCATION AND TRAINING PROGRAMS.

...CURRENT IMPORTANT PROGRAMS

WATER LAVAGE.  
COMBAT RESTORATIVE MATERIALS.  
CYANOACRYLATES.  
BIODEGRADABLE MATERIALS.  
NITINOL.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOR EQUIPMENT -- 1. ELECTRON MICROSCOPES, 2. STRESS/FATIGUE TESTING  
EQUIPMENT, 3. SPECTROPHOTOMETER, 4. SCINILLATION COUNTER, 5. LYOPHILI-  
ZERS, 6. GAS CHROMATOGRAPH, 7. CRYOSTAT, 8. CRYOSURGERY UNIT, 9. DENTAL  
OPERATING EQUIPMENT, 10. ULTRACENTRIFUGE, 11. MULTI-CHANNEL PHYSIOLOGIC  
RECORDERS, 12. THERMAL ANALYSIS SYSTEM, 13. MICROSTOOLMAKER, 14. MICRO-  
SCOPES, 15. STERILIZERS.  
CAPABILITIES- FULL SPECTRUM BIOCHEMISTRY, HISTOLOGIC, PATHOLOGIC, MICRO-  
BIOLOGIC AND ELECTRON MICROSCOPY LABORATORIES. EXTENSIVE METALLURGICAL  
AND MATERIALS TESTING LABORATORY. ANIMAL SURGERY. DENTAL RESEARCH.  
EDUCATION.

INSTALLATION INST.OF SURGICAL RSCH. BROOKE AMC, FT SAM HOUSTON,TEX

C.O. LTC BASIL A. PRUITT, JR. TECH. DIR. DR. ARTHUR D. MASON, JR.

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.300	1.425
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.276	1.335
TOTAL ANNUAL LAB	2.576	2.760
TOTAL INHOUSE	2.576	2.760
TOTAL INHOUSE RDT+E	1.300	1.425
ANNUAL OPERATING COST	0.095	0.105

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	116	22	42	74
CIVILIAN	75	3	21	54
TOTAL	191	25	63	128

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1	18.424	0.800	19.000	38.224	1.860	0.868

...MISSION

CONDUCT BOTH CLINICAL AND LABORATORY STUDIES IN TREATMENT OF THERMAL AND TRAUMATIC INJURIES. PROVIDE CARE FOR PATIENTS WITH THESE TYPES OF INJURIES. TRAIN OTHERS IN CARE OF SUCH PATIENTS.

...CURRENT IMPORTANT PROGRAMS

STUDY OF POSTBURN HEMODYNAMIC AND PULMONARY CHANGES. EVALUATION AND SYNTHESIS OF TOPICAL AGENTS TO CONTROL INFECTION. STUDY OF ACUTE RENAL FAILURE AND RENAL PHYSIOLOGY. STUDY OF POSTBURN HEMATOLOGY AND IMMUNOLOGY. METABOLIC CHANGES FOLLOWING BURNS AND EFFECTS OF HYPERALIMENTATION.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

OPERATES 60 BEDS FOR SERIOUSLY BURNED AND INJURED PATIENTS. PROVIDES CLINICAL LABORATORY SUPPORT WITH CAPABILITIES IN THE FIELDS OF PATHOLOGY (INCLUDING USE OF ELECTRON MICROSCOPE), MICROBIOLOGY, EXPERIMENTAL SURGERY, RENAL PHYSIOLOGY AND BIOCHEMISTRY. MAINTAINS AN ANIMAL COLONY, ELECTRONIC SHOP, MACHINE SHOP AND SURGICAL LIBRARY.

INSTALLATION LAND WARFARE LAB, ABERDEEN P.G., MD.

C.O. COL R.L. CLARKSON TECH. DIR. DR. R.D. SHELTON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	6.303	8.150
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.606	0.000
TOTAL OTHER	0.255	0.280
TOTAL ANNUAL LAB	7.164	8.430
TOTAL INHOUSE	4.563	4.398
TOTAL INHOUSE RDT+E	3.898	4.118
ANNUAL OPERATING COST	2.276	2.366

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	18	0	15	3
CIVILIAN	124	3	57	67
TOTAL	142	3	72	70

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
80	39.311	2.655	12.628	54.594	0.687	0.696

...MISSION

TO PROVIDE A CENTRALIZED QUICK REACTION RESEARCH AND DEVELOPMENT FACILITY FOR ACCOMPLISHING DEVELOPMENT OF SPECIALIZED MILITARY ITEMS AND FOR THE GENERATION OF NEW IDEAS FOR SUCH MATERIAL

...CURRENT IMPORTANT PROGRAMS

DETECTION OF DRUGS  
IMPROVED MOBILITY  
EXPLOSIVES DETECTION  
POSITION MARKING  
SURVIVAL TECHNIQUES AND EQUIPMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

THE USALWL PROVIDES RESEARCH AND DEVELOPMENT ASSISTANCE TO SOLUTION OF FIELD PROBLEMS IN ALL THEATERS AND IN ALL CLIMATES AND GEOGRAPHIES. THE LABORATORY CAPABILITY COVERS ALL MAJOR SCIENTIFIC AREAS. WITH 57 PROFESSIONAL PERSONNEL THE ORGANIZATION CONTAINS 7 SMALL WELL-EQUIPPED WORKING LABS IN COMMUNICATIONS/ELECTRONICS, MUNITIONS, MOBILITY, ENVIRONMENT AND SURVIVAL, APPLIED CHEMISTRY, APPLIED PHYSICS AND BIOLOGICAL SCIENCES, FURTHER, THE LABORATORY HAS INHOUSE DESIGN AND PROTOTYPE FABRICATION CAPABILITY IN METALS AND WOOD. THE ORGANIZATION IS ASSIGNED AN EIGHTY ACRE TEST FACILITY FOR DEVELOPMENTAL TESTING OF PERTINENT ITEMS AND IS LOCATED AT ABERDEEN PROVING GROUND, MARYLAND WHERE MANY MAJOR TESTING FACILITIES ARE READILY AVAILABLE.

INSTALLATION LETTERMAN ARMY INST. OF RSCH. PRESIDIO OF SAN FRAN, CAL.

C.O. COL WILLIAM A. AKERS TECH. DIR. DR. JAMES R. NEVILLE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.666	0.694
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	7.694	11.251
TOTAL ANNUAL LAB	8.360	11.945
TOTAL INHOUSE	8.360	11.945
TOTAL INHOUSE RDT+E	0.666	0.694
ANNUAL OPERATING COST	0.257	0.372

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	86	22	62	24
CIVILIAN	19	3	9	10
TOTAL	105	25	71	34

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP EQUIP
0	60.102	8.900	0.000	69.002	0.052	2.552

...MISSION

LAIR CONDUCTS RESEARCH IN THE FIELDS OF MEDICINE AND CHEMISTRY. GUIDES, COORDINATES, SUPPORTS RESEARCH PROJECTS OF STAFF MEMBERS OF LETTERMAN GENERAL HOSPITAL. SIMILARLY SUPPORTS RESEARCH IN HOSPITALS AT CLASS I INSTALLATIONS. MONITORS OTHER RESEARCH AS DIRECTED BY CG, USAMRDC.

...CURRENT IMPORTANT PROGRAMS

ASSAULTS AGAINST HUMAN SKIN -- WATER, HEAT, HUMIDITY, FRICTION, INSECTS, BACTERIA, FUNGI, ALONE AND IN COMBINATION. SURVEY OF MAXILLOFACIAL INJURIES. EARLY RESTORATION OF ORAL INTEGRITY. BONE REPAIR, BACTEREMIA. HEMORRHAGIC SHOCK. TEST COMPOUNDED RADIO-PHARMACEUTICALS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

LABORATORIES NOW EQUIPPED FOR BACTERIOLOGY (CUTANEOUS AND CRAL), BIOCHEMISTRY, BLOOD GAS ANALYSIS, CHROMATOGRAPHY, ENZYMOLOGY, HEMATOLOGY, HISTOLOGY, IMMUNOLOGY, MYCOLOGY, NUCLEAR PHARMACY, ANIMAL PHYSIOLOGY, AND ISOTOPIC SCANNING (ANIMAL AND HUMAN). 30 VOLUNTEERS ARE USED IN STUDIES OF DELAYED HYPERSENSITIVITY, FRICTION BLISTERS, FUNGAL SKIN INFECTIONS, MOSQUITO REPELLENTS, PROLONGED WARM WATER IMMERSION, AND PRICKLY HEAT RASH. ESTABLISHED A NEW BREEDING COLONY OF CHASES GUINEA PIGS FOR CUTANEOUS DELAYED HYPERSENSITIVITY, BONE GRAFTING, REPAIR, AND HEALING STUDIES, PHYSICAL METHODS, AND HISTOLOGY. RADIOIMMUNOASSAYS OF ANGIOTENSIN I AND II, AND RENIN DEVELOPED AND IN CLINICAL USE.

INSTALLATION MATERIALS AND MECHANICS RSCH CENTER WATERTOWN, MASS.

C.O. MAJ K.I. KAWANO DIR. DR. A.E. GORUM

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	12.847	11.361
TOTAL PROCUREMENT	1.825	2.095
TOTAL O+M	1.003	1.295
TOTAL OTHER	7.137	0.484
TOTAL ANNUAL LAB	22.812	15.235
TOTAL INHOUSE	9.717	9.333
TOTAL INHOUSE RDT+E	7.886	7.273
ANNUAL OPERATING COST	3.596	3.822

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	12	6	12		0
CIVILIAN	610	61	214		396
TOTAL	622	67	226		396

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB ADMIN	OF SQUARE FEET	OTHER	TOTAL	REAL PROP	EQUIP
48	410.100 122.400	129.000	661.500		14.212	13.208

...MISSION

MANAGE AMC R+D STRUCTURAL MATERIALS + MECHANICS PROG.CONDUCT TECHNOLOGI-  
CAL PROGRAMS IN MATERIALS + MECHANICS USED IN ARMY MATERIEL.EXECUTE PROG  
IN OWN FACILITIES + BY ASSIGNMENT + FUND TRANSFER TO CHTER AMC LABS +  
CONTRACTORS.PROVIDE DIRECTION + TECH ASST ON MATERIALS + MECHANICS.

...CURRENT IMPORTANT PROGRAMS

R+D PROGRAMS FOR IMPROVED MATERIAL - ARMOR  
R+D PROGRAMS FOR IMPROVED MATERIAL - ABM HARDENING  
R+D PROGRAMS FOR IMPROVED MATERIAL - AIRCRAFT  
R+D PROGRAMS FOR IMPROVED MATERIAL - MATERIALS-PROCESSING + EVALUATION  
R+D PROGRAMS FOR IMPROVED MATERIAL - AMMLNITION

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MANAGE AMC R+D PROG IN MATERIALS + MECHANICS + CONDUCT TECH PROGS IN MA-  
TERIALS SYSTEMS + MECHANICS DIRECTED TO ARMY MATERIEL.MANAGE DOD PROG AS  
EXECUTIVE AGENT-ARMOR TECHNOLOGY.MANAGE + CONDUCT INTEGRATED + DIRECTED  
BASIC + APPLIED RES ON MATERIALS SUCH AS METALS,CERAMICS,ORGANIC + IN-  
ORGANIC POLYMERS + COMPOSITES.MANAGE + CONDUCT THEORETICAL + APPLIED  
STUDIES ON MECHANICS OF MATLS + SYSTEMS.IDENTIFY + INVES BASIC FACTORS  
INVOLVED IN PROCESSING + APPLICATIONS OF NEW + IMPROVED MATERIALS. OPER-  
ATE DOD NDT INFO ANALYSIS CTR.ASSIST IN DESIGN + DEVEL OF PROTOTYPES.  
DEVELOP METHODS FOR TEST + EVALUATION OF MATERIALS + STRUCTURES.MANAGE  
ARMY PORTION DEFENSE STANDARDIZATION PROG.CONDUCT ENGINEERING STANDARD-  
IZATION EFFORT.MANAGE AMC MATERIALS TEST PROG.CONDUCT PEMA MANUF METHOD  
+ TECHNOLOGY PROG + ADVISE COMMAND + INDUSTRY ON PROCESSING TECHNIQUES.

INSTALLATION MEDICAL BIOMECHANICAL RES. LAB., W. REED AMC, WASH DC

C.O. LTC ORLYN C. DESTEREICH SCIENTIFIC DIR. DR. FRED LEONARD

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.637	0.662
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.113	0.104
TOTAL ANNUAL LAB	0.750	0.764
TOTAL INHOUSE	0.750	0.764
TOTAL INHOUSE RDT+E	0.637	0.662
ANNUAL OPERATING COST	0.060	0.045

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	17	3	13	4
CIVILIAN	30	4	14	16
TOTAL	47	7	27	20

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
0	11.463	1.022	0.000	12.485	0.930	0.380

...MISSION  
TO CONDUCT FUNDAMENTAL AND APPLIED RESEARCH TO DEVELOP MATERIALS AND DEVICES FOR INTERNAL AND EXTERNAL BIOMECHANICAL APPLICATION AND THE FABRICATION OF PROTOTYPE DEVICES OF SPECIALIZED MILITARY NATURE OF MEDICAL INTEREST.

...CURRENT IMPORTANT PROGRAMS  
SYNTHESIS AND CHARACTERIZATION OF SURGICAL REPAIR MATERIALS AND HEMOSTATIC AGENTS. VIABLE AND NECROTIC TISSUE DIFFERENTIATION. MINERALIZATION OF SKELETAL AND SOFT TISSUE AND MEANS OF ENHANCING THE RATE OF BONE HEALING. PROSTHETIC AND ORTHOTIC DEVICES FOR THE SEVERELY HANDICAPPED/TRAUMATIZED PATIENT.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
USAMBRL HAS EQUIPMENT AND FACILITIES TO CARRY OUT ITS RESEARCH TO DEVELOP SURGICAL REPAIR MATERIALS, TO EFFECT HEMOSTASIS AND REPAIR OF TISSUES OR ORGANS, PROSTHETIC AND ORTHOTIC SYSTEMS, BIOMEDICAL DEVICES AND MAXILLOFACIAL PROSTHESES. THIS INCLUDES INSTRUMENTATION FOR LIGHT SCATTERING, CHROMATOGRAPHY, ULTRACENTRIFUGATION RADIOASSAYS, OPTICAL METHODS, DATA, SYNTHESIS, STEAM STERILIZATION, OVENS, BATHS, HISTOLOGY AND ELECTRON MICROSCOPY, CELL AND TISSUE CULTURE STUDIES, ANIMAL HOLDING FACILITY, EXPERIMENTAL SURGERY ROOM, ISOTOPE, METABOLIC, AUTORADIOGRAPHY, CELL ORGANELLE, RADIOLOGY, X-RAY STUDIES, MACHINE SHOP EQUIPPED WITH WELDING AND METAL WORKING MACHINES.

INSTALLATION MEDICAL EQUIP. R+D LAB., FT. TOTTEN, FLUSHING, N.Y.

C.O. COL ROBERT J. ROGERS TECH. DIR. AARON ISMACH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.630	0.837
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.161	0.166
TOTAL ANNUAL LAB	0.791	1.003
TOTAL INHOUSE	0.791	1.003
TOTAL INHOUSE RDT+E	0.630	0.837
ANNUAL OPERATING COST	0.394	0.390

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	15	0	8	7
CIVILIAN	39	0	8	31
TOTAL	54	0	16	38

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	7.864	3.577	31.709	43.150	0.556	0.466

...MISSION

CONDUCTS ENGINEERING RESEARCH AND DEVELOPMENT LEADING TO PRODUCTION OF FIELD MILITARY MEDICAL EQUIPMENT FOR THE ARMY AND ON A REQUIRED BASIS FOR THE OTHER SERVICES.

...CURRENT IMPORTANT PROGRAMS

ARTHROPOD AND RODENT CONTROL EQUIPMENT. PULSED WATER PRESSURE DEVICE FOR CLEANING ANESTHESIA EQUIPMENT. FIELD DENTAL EQUIPMENT. HYPODERMIC INJECTION APPARATUS, VETERINARY MEDICINE, FIELD MEDICAL HUMAN BODY DIAGNOSTIC EXAMINATION AND RECORDING SYSTEM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

THE LABORATORY OCCUPIES THREE BUILDINGS UTILIZING A TOTAL OF 11,200 SQUARE FEET FOR ADMINISTRATION, 5,000 FOR T+E, 13,127 FOR SHOP SPACE AND 14,151 FOR STORAGE. DATA DO NOT INCLUDE SUCH AREAS AS LABORATORIES, CORRIDORS, ETC. EQUIPMENT AND FACILITIES INCLUDE AN ELECTRICAL-ELECTRONICS BRANCH EQUIPPED WITH HAND METERS, OSCILLOSCOPES, GENERATORS, REGULATED POWER SOURCES AND RECORDERS, A PHYSICAL TESTING BRANCH EQUIPPED WITH AN INSTRON TESTING MACHINE, AND ENVIRONMENTAL CHAMBERS, A PROTOTYPE FABRICATION FACILITY EQUIPPED WITH LATHES, MILLING MACHINES, SURFACE GRINDERS, SHEARS, POWER BRAKE, POWER ROLLER, SPOT WELDERS, FOUNDRY, HELIARC AND GAS WELDING EQUIPMENT, HEATING, TREATING OVEN, PAINT OVEN, FABRIC SEWING MACHINES, PLASTIC FORMING EQUIPMENT, CARPENTRY AND PATTERN AND MODEL MAKING TOOLS.

INSTALLATION MED.RSCH OF INFECTIOUS DISEASES, FT. DETRICK, MD.

C.O. COL DAN CROZIER TECH. DIR. DR. WILLIAM R. BEISEL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	3.904	4.080
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.673	1.681
TOTAL ANNUAL LAB	5.577	5.761
TOTAL INHOUSE	4.560	4.761
TOTAL INHOUSE RDT+E	2.887	3.080
ANNUAL OPERATING COST	0.910	1.349

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	344	38	41	303
CIVILIAN	96	9	20	76
TOTAL	440	47	61	379

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
0	71.728	13.238	105.994	190.960	8.284	1.823

...MISSION

DEVELOP INFORMATION AND MEANS FOR PROVIDING MEDICAL DEFENSE AGAINST BIOLOGICAL WEAPONS ATTACK. ASSESS HAZARD TO U.S. ARMED FORCES, STUDY PATHOGENESIS OF INFECTIONS OF MILITARY IMPORTANCE, DEVELOP PROPHYLACTIC AND THERAPEUTIC MEASURES, INVESTIGATE APPLICABLE DIAGNOSTIC PROCEDURES.

...CURRENT IMPORTANT PROGRAMS

STUDY OF PATHOGENESIS OF INFECTIONS OF MILITARY IMPORTANCE. DEVELOPMENT OF NEW DIAGNOSTIC AND THERAPEUTIC METHODS FOR INFECTICUS AND TOXIC DISEASES. VACCINE DEVELOPMENT, ESPECIALLY VACCINES AGAINST ARBOVIRUS AND RICKETTSIAL DISEASES AND STAPHYLOCCAL ENTEROTOXEMIAS. DEVELOPMENT OF VACCINE COMBINATIONS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

NEW BUILDING, WHEN FULLY OPERATIONAL, WILL CONTAIN 17 SUITES FOR STUDY OF MICROORGANISMS, INCLUDING HIGHLY INFECTIOUS ORGANISMS, FACILITIES FOR ACUTE AND CHRONIC STUDIES, AEROSOL EXPOSURE FACILITIES, MULTIDISCIPLINE-ORIENTED SUPPORT LABORATORIES FOR IMMUNOLOGY, PATHOLOGY, PHYSIOLOGY, BIOCHEMISTRY, BIOPHYSICS, MOLECULAR BIOLOGY AND TISSUE CULTURE, AND HOSPITAL FACILITIES FOR GENERAL MEDICINE AND RESEARCH STUDIES UTILIZING VOLUNTEERS. THE LARGE VOLUNTEER PROGRAM IS ON-GOING, MEN ARE USED FOR VACCINE EVALUATION AND TESTING OF DIAGNOSTIC AND THERAPEUTIC PROCEDURES. CAPABILITIES ALSO EXIST FOR STUDY OF LARGE ANIMALS, PRIMATES AND CUSTOMARY LABORATORY ANIMALS.

INSTALLATION MED. RES. AND NUTR. LAB., FITZSIMONS GH, DENVER, COLO.

C.O. COL JOHN E. CANHAM

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.276	2.281
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.140	1.118
TOTAL ANNUAL LAB	3.416	3.399
TOTAL INHOUSE	3.416	3.399
TOTAL INHOUSE RDT+E	2.276	2.281
ANNUAL OPERATING COST	0.558	0.547

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	113	30	76	37
CIVILIAN	98	12	46	52
TOTAL	211	42	122	89

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	83.663	5.138	19.087	107.888	4.791	3.938

...MISSION

DETERMINE ADEQUACY OF TROOPS DIET IN ALL ENVIRONMENTS AND RECOMMEND NUTRITIONAL MEASURES FOR OPTIMUM PERFORMANCE. CONDUCT RESEARCH ON MEDICAL, SURGICAL AND NUTRITIONAL PROBLEMS, COMPUTER TECHNIQUES IN BIO-MEDICAL AREAS, FOOD HYGIENE, PHYSIOLOGY OF EXERCISE AND FAT.

...CURRENT IMPORTANT PROGRAMS

FACTORS INFLUENCING WORK PERFORMANCE, FATIGUE AND MUSCLE PHYSIO-BIOCHEM IN MAN AND MILITARY DOG. INFLUENCE OF STRESS ON NUTRIENT REQUIREMENTS. MULTIPLE PHYSIO, BIOCHEM AND PATHOLOGICAL ENVIRONMENTAL STUDIES ON EFFECTS OF HIGH TERRESTRIAL ALTITUDE. IDENTIFY CAUSE OF CHRONIC GI PROBLEM. FACTORS INFLUENCING IMMUNITY TO TB.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

HUMAN METABOLIC WARD WITH TEMP AND HUMID CONTROL RM, GERM-FREE ANIMALS, ACOUSTIC PHYSIO PERF, ELECTRON MICROSCOPY, HIGH ALT LAB (PIKES PEAK), ENVIRON TEST CHAMBER, RCA 301-355 ADPS, AUTO ANALYZERS AND RECORDERS INCLUDING AUTO BETA AND GAMMA COUNTERS, SHADOW SHIELD WHOLE BODY COUNTER, AND MASS SPECTROMETER. RSCH INCLUDE- NUTR SURVEYS AND RATION TESTING, RSCH ON MICROBIAL AGENTS CAUSING RESP DISEASE, BIOMED CMPT RSCH, INFLUENCE OF HIGH TERRESTRIAL ALT ON PHYSIO-PSYCHO PERF, BODY COMPOSITION, METABOLISM AND MODIFYING FACTORS, BASIC AND APPLIED STUDIES OF TRACE MINERAL METABOLISM, NUTRIENT RQR AND INTERRELATIONSHIP, METABOLIC RESPONSE OF MAN TO NUTR AND DISEASE, EXPER SURG, COMPARATIVE PATHOLOGY OF STRESS IN ENVIRON AND NUTR, PHYSIO AND BIOCHEM STUDIES OF MUSCLE METABOLISM, EXER AND FATIGUE.

INSTALLATION MEDICAL RES. LAB. FT. KNOX, KY.

C.O. COL NICHOLAS F. CONTE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.854	1.831
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.553	0.591
TOTAL OTHER	0.760	0.807
TOTAL ANNUAL LAB	3.167	3.229
TOTAL INHOUSE	3.167	3.229
TOTAL INHOUSE RDT+E	1.854	1.831
ANNUAL OPERATING COST	0.611	0.670

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	97	14	70	27
CIVILIAN	110	16	31	79
TOTAL	207	30	101	106

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
19	86.786	5.368	26.700	118.854	0.938	3.402

...MISSION

RESEARCH IN SENSORY PHYSIOLOGY, BIOLOGICAL EFFECTS OF COHERENT LIGHT, PHYSIOLOGICAL EFFECTS OF WEAPONS, MECHANICAL AND PHYSICAL SYSTEMS, RESEARCH AND TRAINING IN BLOOD COLLECTION, PROCESSING, PRESERVATION AND TRANSFUSION, OPERATION OF BLOOD DONOR CENTER AND BLOOD BANK FELLOWSHIPS.

...CURRENT IMPORTANT PROGRAMS

SENSORY PSYCHOPHYSIOLOGY - VISION, AUDITION AND WORK PERFORMANCE.  
BIOLOGICAL EFFECTS OF LASER RADIATION.  
METHODOLOGY RELATED TO COLLECTION, PROCESSING, PRESERVATION, SHIPMENT, AND TRANSFUSION OF HUMAN BLOOD.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

EQUIPMENT FACILITIES OF THE MEDICAL RESEARCH LABORATORIES INCLUDE RUBY, CO2, KRYPTON, ARGON LASERS AND ELECTRON MICROSCOPE. FACILITIES CAPABILITIES INCLUDE AN ANECHOIC CHAMBER FOR STUDIES INVOLVING SOUND. ADDITIONALLY, THIS UNIT HAS FUNCTIONAL CAPABILITIES IN THE AREAS OF BIOPHYSICS, HEMATOLOGY, ERGONOMICS, BLOOD COLLECTION AND PROCESSING, PSYCHOPHYSIOLOGY AND BIOCHEMISTRY.

INSTALLATION MEDICAL RESEARCH UNIT, BALBOA HEIGHTS, CANAL ZONE

C.O. LTC JAMES C. BURKE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.163	0.175
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.118	0.121
TOTAL ANNUAL LAB	0.281	0.296
TOTAL INHOUSE	0.281	0.296
TOTAL INHOUSE RDT+E	0.163	0.175
ANNUAL OPERATING COST	0.080	0.090

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	9	2	5		4
CIVILIAN	8	0	0		8
TOTAL	17	2	5		12

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	5.000	0.600	0.000	5.600	0.000	0.061

...MISSION  
IN CONJUNCTION WITH OTHER U.S. GOVERNMENT AGENCIES, CONDUCTS RESEARCH ON MEDICAL AND ENVIRONMENTAL PROBLEMS OF MILITARY IMPORTANCE IN CENTRAL AMERICA, SOUTH AMERICA AND PANAMA.

...CURRENT IMPORTANT PROGRAMS  
PREVALENCE + DISTRIBUTION OF PARASITIC DISEASE IN LATIN AMERICA.  
PATHOGENESIS OF PARASITIC INFECTIONS.  
BIONOMICS OF PHLEBOTOMUS FLIES.  
EPIDEMIOLOGY + IMMUNOLOGY OF TROPICAL VIRUSES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
DIRECT + INDIRECT ISOLATION AND IDENTIFICATION OF PARASITIC ORGANISMS + THEIR VECTORS IN CENTRAL AND SOUTH AMERICA. LABORATORY SPACE ADEQUATE FOR THE SCIENTIFIC DISCIPLINE OF ENTOMOLOGY, PARASITOLOGY, PATHOLOGY AND VIROLOGY. SPECIAL EQUIPMENT AND FACILITIES TO SUPPORT THESE DISCIPLINES INCLUDE -- FLUORESCENT MICROSCOPE, AUTO-TECHNICON, CRYOSTOT, PHOTO-MICROGRAPHY, LABORATORY ANIMAL QUARTERS, TISSUE CULTURE LINES, LIQUID NITROGEN PLANT AND ACCESS TO DATA-PROCESSING SERVICE.

INSTALLATION MEDICAL RES. UNIT, KUALA LUMPUR, MALAYSIA

C.O. COL FRANCIS C. CADIGAN, JR.

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.182	0.182
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.059	0.063
TOTAL ANNUAL LAB	0.241	0.243
TOTAL INHOUSE	0.241	0.243
TOTAL INHOUSE RDT+E	0.182	0.182
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	6	5	7	0
CIVILIAN	0	0	0	0
TOTAL	6	5	7	0

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	7.000	0.900	0.000	7.900	0.100	0.222

...MISSION  
TO STUDY INFECTIOUS DISEASES OF POTENTIAL MILITARY IMPORTANCE IN  
EQUATORIAL ASIA.

...CURRENT IMPORTANT PROGRAMS  
STUDY SCRUB TYPHUS TRANSMISSION IN VIRGIN FORESTS.  
EVALUATE SUB-HUMAN PRIMATES FOR HUMAN MALARIA HOSTS.  
DETERMINE TRANSOVARIAL TRANSMISSION RATE OF RICKETTSIA.  
STUDY DIARRHEA IN ABORIGINAL FOREST DWELLERS.  
TO FIND A DRUG OR NATURAL FACTOR WHICH BLOCKS ENDOTOXIC FEVER AND SHOCK.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
CONTINUE RESEARCH EFFORTS ALONG PRESENT LINES WITHIN THE SCOPE OF  
RESEARCH ACTIVITIES, TO PROVIDE DIAGNOSTIC LABORATORY CONSULTATION FOR  
MALAYSIAN CIVILIAN AND MILITARY MEDICAL SERVICES AND FOR COMMONWEALTH  
MILITARY MEDICAL SERVICES.  
LABORATORY SPACE AND ANIMAL-REARING FACILITIES ARE PROVIDED BY THE  
INSTITUTE FOR MEDICAL RESEARCH, KUALA LUMPUR, MALAYSIA

INSTALLATION            MISSILE COMMAND R+D LABS., REDSTONE ARSENAL, ALA.

C.O. MAJ GEN EDWIN I. DONLEY            DIR. DR. JOHN L. MC DANIEL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	71.635	64.148
TOTAL PROCUREMENT	6.087	3.754
TOTAL O+M	0.438	4.807
TOTAL OTHER	0.578	0.574
TOTAL ANNUAL LAB	78.738	73.283
TOTAL INHOUSE	41.991	31.044
TOTAL INHOUSE RDT+E	35.251	22.979
ANNUAL OPERATING COST	11.849	13.649

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	60	2	75		0
CIVILIAN	1067	49	652		415
TOTAL	1127	51	727		415

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS)		OF SQUARE FEET		REAL PROP	EQUIP
	LAB	ADMIN	OTHER	TOTAL		
11000	898.760	140.606	71.250	1110.616	25.823	25.891

...MISSION

PLAN AND DIRECT MATERIEL DEVELOPMENT PROGRAMS + PROJECTS NOT SELECTED FOR PROJECT OR COMMODITY MGT. MANAGE BASIC + APPLIED RESEARCH PROJECTS. INIT + PERFORM RES + COMPONENT DEV TO GENERATE NEW TECHNOLOGY + PERFORM FEASIBILITY + DESIGN STUDIES FOR FUTURE WEAPON SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

CANNON LAUNCHED GUIDED PROJECTILE  
 LASER GUIDED HONEST JOHN  
 ADVANCED LASER DEVELOPMENT  
 TERMINALLY GUIDED SUBMISSILES  
 MISSILE TECHNOLOGY - EQUIPMENT SYSTEMS DEMONSTRATIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PERFORM LONG-RANGE TECH PLANNING. DESIGN, DEV, + FABRICATE PROTOTYPE MSL SYS. TECH EVAL + SUPV OF CONTR PROPOSALS + EFFORTS. PLAN + CONDUCT ENGR DESIGN TESTS. OPERATE AIGMT CTR + ARPT+M CTR. PLAN + DIRECT DEVELOPMENT OF TEST EQUIP FOR SYS INSTALL + TEST REQUIREMENTS  
 GUIDANCE + CONTROL CLEAN-ROOM COMPLEX, SIMUL FAC CONSISTING OFRF SHIELD ED ANECHOIC CHAMBER, INFRARED SYS SIMUL + ELECTRO-OPTICAL SYS SIMULATOR, DUAL-POSITION TEST STD, 8000-KW JET FAC HIGH-VELOCITY, 2-MEV VAN DE GRAFF, HI-ENERGY LASER FAC, DYNAMIC MODULES TESTERS, X-RAY DIFFRACTOMETER + SPECTROGRAPH, PROPELLANT EVAL FAC, 13 ANALOG + 4 DIGITAL COMPUTERS. MC MORROW LABS - SEIO, AERO, ADV SEN, G+C, + GEN DIR 359000 SQ FT SPACE + \$17M EQUIP. T+E DIR OCCUPIES 13000 ACRES W/FACIL + CAPABIL F/ FLT, TRACK, + STATIC TESTING FAC, SYS ENVIRON, COMP TEST EQUIP + ANALYTICAL SERVICES.

INSTALLATION MOBILITY EQUIP. RES. AND DEVELOP. CENTER, FT BELVOIR,

C.O. COL BENNETT L. LEWIS TECH. DIR. WILLIAM B. TAYLOR

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	33.741	37.347
TOTAL PROCUREMENT	11.046	20.551
TOTAL O+M	7.228	7.284
TOTAL OTHER	0.753	0.550
TOTAL ANNUAL LAB	52.768	65.732
TOTAL INHOUSE	25.195	24.034
TOTAL INHOUSE RDT+E	15.915	16.500
ANNUAL OPERATING COST	6.149	6.200

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	54	1	44	10
CIVILIAN	1306	9	390	916
TOTAL	1360	10	434	926

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
1060	LAB	ADMIN	OTHER	860.678	23.197	29.602
	285.697	217.336	357.645			

...MISSION

BASIC AND APP RSCH DEV AND ENGR TEST ON ASGND EQUIP (RAIL MARINE AMPHIB BDG ASLT STREAM CROSSING ELEC PWR GEN INDUS ENGS CONST FIREFTG PREFABS HTG AC WASTE DISPOSAL WATER PURIF CAMOU MINE WARFARE BARR-CTRBARR FUELS HDL MHE DEMLS PHYS SEC) ENGR SPT TO MSC QUAN PROC AND MAINT ACTIVITIES.

...CURRENT IMPORTANT PROGRAMS

EARTHMOVING FAMILY OF ENGR CONSTRUCTION EQUIPMENT (FAMECE)  
ELEC PWR GEN INCL LIQ FUEL CELLS ENCLD RANKING CYC PLTS-TURBOALTERNATRS  
MINE NEUTRALIZATION MINE DETECTION COUNTERMINES SYSTEMS  
SENSORS AND DETECTORS FOR COUNTERINTRUSION SYSTEMS  
LIGHTWEIGHT FLOATING BRIDGE (RIBBON BRIDGE)

...FUNCTIONS/EQUIPMENT/CAPABILITIES

OFFICES AND LABORATORIES WITH SUPPORTING DATA PROCESSING ENGINEERING AND INSTRUMENTATION SVCS SHOPS TEST COURSES AND TEST LANES. EQUIPMENT AND CAPABILITIES INCLUDE FUEL CELL AND POWER PLANT LABS AC AND HTG LAB ANACHOIC MICROWAVE SCATTERING FACILITY. ECHO FREE ANACHOIC CHAMBER FOR ACOUSTIC HOMING STUDIES. ENERGY CONVERSION RESEARCH FACILITY, HIGH PRESSURE AIR COMPRESSORS. HYDRAULICALLY ACTUATED TEST FRAME FOR BRIDGES SHOCK TEST TUBE SIMULATING HIGH EXPLOSIVE BLAST EFFECTS, POWER SYSTEMS SIMULATOR, OUTDOOR RAIN TEST SITE, FULL SCALE RAILCAR HUMP TEST FACILITY AND LARGE AND SMALL TROPICAL TEMPERATURE AND HUMIDITY TEST CHAMBERS

INSTALLATION NATICK LABS., NATICK, MASS

C.O. COL WILLIAM LEVIN SCIENCE DIR. DR. DALE H. SIELING

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	16.056	21.583
TOTAL PROCUREMENT	1.303	0.838
TOTAL O+M	9.898	8.721
TOTAL OTHER	1.365	1.527
TOTAL ANNUAL LAB	28.622	32.669
TOTAL INHOUSE	23.511	25.482
TOTAL INHOUSE RDT+E	12.585	15.331
ANNUAL OPERATING COST	5.311	5.150

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	150	10	72	78
CIVILIAN	1242	95	487	755
TOTAL	1392	105	559	833

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
3087	525.000	65.900	274.600	865.500	39.024	12.458

...MISSION

ACCOM ASG R-D IN THE PHYS AND BIOL SCI AND ENG TO MEET MIL RQR IN THE COMMODITY AREAS OF TEX CLO BODY ARMOR ORG MATLS INSECT AND FUNG SUBS CNTRS FOOD SVC EQUIP FLD SPT EQUIP TENT AND EQUIP AND AIR DEL EQUIP. IN DESIG CMDTY AREAS PROV TECH AND ENG SPT IN CONNEX W/ACCOM CF AE AND STD.

...CURRENT IMPORTANT PROGRAMS

FOOD SERVICE SYSTEM FOR THE ARMY IN THE FIELD  
L' ALTITUDE AIRDROP SYS FOR PERS SUPPL AND EQUIP  
RELIABILITY OF FLEXIBLE PACKAGING FOR FOOD  
PERSONNEL ARMOR PROGRAM  
POLLUTION ABATE BY ENZY CONV OF CELLULOSIC MATLS TO FOOD-CLEAN BURN FUEL

...FUNCTIONS/EQUIPMENT/CAPABILITIES

COBALT 60 IRRAD FACILITY DESIGNED FOR MAX FLEXIBILITY IN FOOD PROCESSING  
BACTERIOLOGY LAB EQUIP FOR INVESTIGATIONS OF PATHOGENIC MICROORGANISMS  
FLAME PROTECTION LAB AND FACILITY INCLUDING AN OUTDOOR FLAME PIT  
HIGH RESOLUTION MASS SPECTROMETER FOR ANALYSIS OF VOLATILE COMPOUNDS  
FOOD PROCESSING FAC FOR CONTROLLED PREPROCESSING AND PROC BY SEV TECHNIQ  
LAB SUBSONIC WIND TUNNEL CAPABLE OF VELOCITIES UP TO 110 FEET PER SEC  
HEAT TRANSFER LAB TO STUDY HEAT AND MASS TRANSPORT CHAR OF FABRICS  
ELECTRON LINEAR ACCELERATOR DESIGNED FOR HIGH POWER OUTPUT IN FOOD PROV  
DROP TEST FAC CONS OF 40 TON CAPACITY TRACKED CRANE AND A 50 FT BOOM  
DYEING AND FINISHING LAB FOR CONDUCTING STUDIES OF TEXTILES  
FEBETRON MACHINE USED AS A RADIA SOURCE FOR PULSE RADIOLYSIS STUDIES  
RAIN ROOM DESIGNED TO DUPLICATE RAINFALL CORRESPONDING TO NATURAL RAIN

INSTALLATION NIGHT VISION LABORATORY, FORT BELVOIR, VA.

DIR. BENJAMIN GOLDBERG

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	30.090	29.802
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	30.090	29.802
TOTAL INHOUSE	16.542	15.438
TOTAL INHOUSE RDT+E	16.542	15.438
ANNUAL OPERATING COST	2.603	3.129

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	30	0	15		15
CIVILIAN	423	33	220		203
TOTAL	453	33	235		218

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	73.625	29.883	67.131	170.639	4.295	36.200

...MISSION

SERVES AS AMC LEAD LABORATORY AND AMC TECHNOLOGY CENTER FOR RESEARCH + DEVELOPMENT OF NIGHT VISION SYSTEMS. TECHNOLOGIES OF NIGHT VISION INCLUDE, BUT ARE NOT LIMITED TO, BATTLEFIELD ILLUMINATION, NEAR INFRARED, FAR INFRARED, IMAGE INTENSIFICATION, TV AND THIN FILMS.

...CURRENT IMPORTANT PROGRAMS

NIGHT VISION SYSTEMS FOR ARMY AIRCRAFT AND COMBAT VEHICLES  
 NIGHT VISION SYSTEMS FOR MISSILES AND WEAPON SYSTEMS  
 RES ON PHOTOCATHODES OFFERING TENFOLD IMPR IN NV DEVICE PERFORMANCE  
 ESTAB VISIONICS TECHNOLOGY FOR OBJ ANALYSIS AND SYNTHESIS OF NV SYSTEMS  
 RES ON NON-SCANNING DIRECT CONVERSION THERMAL IMAGING DEVICES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

EXTENSIVE TEST FACILITIES AND EQUIPMENT FOR THE SPECIFIC OPTICS, ELECTRON OPTICS, CERAMICS, REFRACTORIES AND GLASS, ELECTRONIC AND ELECTRICAL ENGINEERING COMPONENTS PECULIAR TO NV TECHNOLOGY. FACILITIES FOR RESEARCH, TEST AND EVALUATION OF SOLID STATE PHYSICS SUCH AS INFRARED AND ULTRAVIOLET DETECTION, OPTICAL DETECTION, PLASMA PHYSICS, MASERS + LASERS CRYSTALLOGRAPHY, ORGANIC CHEMISTRY, THERMO-DYNAMICS + ATMOSPHERIC PHYSICS, SPECIFICALLY APPLICABLE TO THE VARIOUS NV TECHNOLOGIES. FACILITIES FOR IMAGE INTENSIFIER OPTICS, POWER SUPPLIES, FAR INFRARED SYSTEMS DEVELOPMENT, FIR DETECTION AND IMAGING CAPABILITY, BOTH GROUND + AIRBORNE. FACILITIES FOR IMAGE SIMULATION, VISUAL PERCEPTION EVALUATION, SEARCH AND TARGET RECOGNITION. NIGHT VISION FIELD TEST EQUIPMENT FACILITY WITH CONTROLLED BACKGROUND.

INSTALLATION PICATINNY ARSENAL LABS., DOVER, N.J.

C.O. COL G.M. MONTGOMERY TECH. DIR. H.W. PAINTER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	75.600	84.901
TOTAL PROCUREMENT	29.000	23.000
TOTAL O+M	5.400	6.600
TOTAL OTHER	0.000	0.200
TOTAL ANNUAL LAB	110.000	114.501
TOTAL INHOUSE	86.215	88.014
TOTAL INHOUSE RDT+E	51.815	58.414
ANNUAL OPERATING COST	4.517	5.500

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	68	2	59	9	
CIVILIAN	2575	62	1775	800	
TOTAL	2643	64	1834	809	

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
6495	594.642	668.245	2580.998	3843.885	72.150	50.500

...MISSION

CEN FOR LIFE CYCLE FUNC FR BASIC AND APPLIED RSCH THRU DEVMT AND ENGRG OF NUC AND CONVL MUNS SUCH AS MINES, GRENS, RKT AND MSL WHCS, PROJS, FUZES, EXPLOS, PYRO, PROP, MATS, PHYS AND ENGRG SCIENCE, DIGITAL ANALOG CMPTG. PROCS ALL NUC AND ASG CONVL MUNS. OPS ARMY EODC, DOD PLASTEC

...CURRENT IMPORTANT PROGRAMS

MINE SYSTEMS DEVELOPMENT  
EXPLOSIVES AND PYROTECHNICS RESEARCH  
PROJECTILE XM517  
PROJECTILE 8 INCH RA HE XM650  
SAFEGUARD WARHEAD SECTIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

NUC WPNS, PROTOTYPE FAB AND ASSY, AND EXPLOS AND PROP PLT PLANTS PROV COMPL INTRGED FAC FOR ASSY, INSP AND TEST OF AK AND CONVL MUNS AND COMPS AND THE MFG AND PROCING OF X EXPLOS AND PROP COMP. THE EXPLOS, PYRO, PROP, MATLS AND QA LABS HAVE UNUSUAL EQUIP FOR RSCH, RELIABILITY AND QA SUCH AS BETATRON, DYNAMITRON, HIGH SPEED PHOTO AND SHCCK LCAD FAC, HIGH ALT TEST CHAMBERS, ELECTROMAGNETIC RADIATION INSP ETC. THE DEVMT AND ENVIRONMENTAL TEST AND EVAL FAC HAVE MAJOR CPBLTY AS STATIC AND DYNAMIC TEST RGS, DROP TOWERS, DUD RECOVY AND DISASSEMBLY, RF VULNERABILITY, COMPL ENVIRONMENTAL SIM, TARGET EFFS ETC. OTHER EQUIP INCL VIBRATORS FOR LOADS TO 2000 LB, STATIC RKT TEST RG, 2540 TON HYCROSTATIC PRESS, CMPT TAPE CON MFG EQUIP, VARIETY OF FUZE EVAL EQUIP, CLOSED CIRCUIT TV, HIGH ACCEL SLED TRACK.

INSTALLATION RES. INST. OF ENVIRONMENTAL MEDICINE, NATICK, MASS.  
 C.O. COL LEEROY G. JONES TECH. DIR. DR. DAVID E. BASS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.503	2.676
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.736	0.749
TOTAL ANNUAL LAB	3.239	3.425
TOTAL INHOUSE	3.239	3.425
TOTAL INHOUSE RDT+E	2.503	2.676
ANNUAL OPERATING COST	1.119	1.150

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	84	24	61	23
CIVILIAN	104	21	50	54
TOTAL	188	45	111	77

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	70.157	12.356	31.167	113.680	6.902	1.952

...MISSION  
 TO CONDUCT BASIC AND APPLIED RESEARCH TO DETERMINE HOW HEAT, COLD, HIGH TERRESTRIAL ELEVATION AND WORK AFFECT THE SOLDIERS LIFE PROCESSES, PERFORMANCE AND HEALTH, AND REPORT AND ADVISE THE ARMY AND THE SCIENTIFIC COMMUNITY.

...CURRENT IMPORTANT PROGRAMS  
 PREVENTION AND TREATMENT OF DISABILITIES DUE TO MILITARY OPERATIONS IN THE HEAT, COLD, AND ALTITUDES. PREDICTION OF LIMITS OF MILITARY PERFORMANCE AS A FUNCTION OF ENVIRONMENT, CLOTHING AND EQUIPMENT. MEDICAL PROBLEMS IN MILITARY ARCTIC OPERATIONS. BIOLOGICAL PROCESSES THAT LIMIT HEAVY PHYSICAL WORK.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 CONDUCT RESEARCH AND PROVIDE GUIDANCE TO DESIGNERS, ENGINEERS, TACTICIANS, PLANNERS AND PHYSICIANS ON MILITARY PERFORMANCE AND CASUALTY PREVENTION AND TREATMENT IN EXTREME CLIMATES AND ENGINEERED ENVIRONMENTS, ADVISE ON HEALTH AND SAFETY IN MANEUVERS DURING HEAT, COLD OR HYPOXIC STRESS, TREAT COLD CASUALTIES AT BASSETT ARMY HOSP., ALASKA. IN HUMAN AND ANIMAL RESEARCH, USE APPROXIMATELY 50 VOLUNTEER TEST SUBJECTS AND EXTENSIVE CLIMATIC CHAMBERS OF NLABS PLUS MANY INTRINSIC SMALLER CHAMBERS, EXTENSIVE ANIMAL CARE FACILITIES, ELECTRON MICROSCOPE, UNDERWATER RESEARCH POOL, COPPER MANIKINS, AND DIVERSE EQUIPMENT FOR BIOCHEMICAL, BIOPHYSICAL, MEDICAL, PHYSIOLOGICAL, PHARMACOLOGICAL, AND PSYCHOLOGICAL MEASUREMENT.

INSTALLATION ROCK ISLAND ARSENAL LABS., ROCK ISLAND, ILL  
 C.O. MAJ GEN H.A. RASMUSSEN CHIEF SCIENTIST DR. C.M. HUDSON

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	15.394	13.489
TOTAL PROCUREMENT	0.990	0.291
TOTAL O+M	5.651	5.648
TOTAL OTHER	0.164	0.115
TOTAL ANNUAL LAB	22.199	19.463
TOTAL INHOUSE	14.216	14.555
TOTAL INHOUSE RDT+E	8.416	9.002
ANNUAL OPERATING COST	5.429	6.050

PERSONNEL DATA (END OF FY 1971)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	15	1	13	2
CIVILIAN	787	36	320	467
TOTAL	802	37	333	469

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
18	95.600	91.020	204.754	391.374	1.466	10.259

...MISSION

ACFT WPN SYS, ARTY + INF WPNS, CREW SERVED WPNS MTD ON ANY TYPE VEH, + INF + CONVL ARTY LNCH DVC FOR BOTH CONVL SHL + H CAP BST RKT ARTY SHL, EXCL FREE RKT, GM, BAL MSL, TGT MSL + RELATED LANH + GSE. CLIPS LK + MAG FLR FOR CONVL AMMO, TK, SP ARTY + ASGD SPV/TRT, CUPCLA, RCL + MT, ELEV + TRAV MECH.

...CURRENT IMPORTANT PROGRAMS

1 GUN AIR DEFENSE EFFECTIVENESS STUDY GADES 2 SOFT RECCIL XM204  
 3 SIMULATION TO DETERMINE DYNAMIC RESPONSE OF WEAPONS TO VARIED CONDITIONS OF MOUNTING AND/OR LUBRICANT 4 SQUAD AUTOMATIC WEAPONS  
 5 MATH MODELING OF ARMORED WEAPON SYSTEMS UNDER DYNAMIC CONDITIONS, TO SIMULATE MID-INTENSITY COMBAT DYN TACS + PREDICT HIT PROBABILITY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FAC CAPABILITIES ORNG FAC PERMIT FIRING ARTY WPN OF 105MM SIZE OR SMALLER USING INRT PJCTL AT 0 DEGREES EL IN; 0 PRF BUTT AT 100 YDS DIST. WPN FIR AT EL USING DISINTEGRATING PJCTL LOADED W/WET SAND. RNG BLDG HSG INDOOR RNG. 2 ARE 100 MTR. 1 CLIMATIC CHMBR RNG 1000 IN W/CONT HMD TEMP OF -90 DEGREE F / 200 DEGREE F. 1 1000 IN WPN MT SIM RNG. ANY SA WPN THRU 40MM CAN BE FIRED. LATTER RNG 25 W 20 H PERMITS FIRING FROM TK CR HLCPTR. ACCESS TO IBM 360/65 COMPUTATION CENTER. PROTOTYPE SHOP IN SUPPORT OF RDTE.  
 MAJOR EQUIP ILLUSTROMAT 1200 CMPTR GRPHS MT INSTM SYS VAR FLEXIBILITY GUN MT PROTOTYPE HIGH-SPEED SCNG IR RADIOMETER SYS HOLOGRAPHIC SYS VAR ANGLE HLCPTR MT ALPHA LUBT TESTER MODEL LFW3 MOTION TABLE FOR SMALL TURRET STBLN TESTING HYDR FLOW SIM HYFLOS SMALL TURRET FIRING FIXTURE NON-FIRING AUTO AMMO LOADER FOR TANKS

INSTALLATION RSCH+DEVELOPMENT TECH SUPPORT ACTIVITY FT. MONMOUTH NJ

DIR. EDWARD J. FISTER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	11.004	10.919
TOTAL PROCUREMENT	0.300	0.120
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	11.304	11.019
TOTAL INHOUSE	11.068	10.964
TOTAL INHOUSE RDT+E	10.768	10.864
ANNUAL OPERATING COST	1.716	1.918

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	69	0	8	61
CIVILIAN	595	0	93	502
TOTAL	664	0	101	563

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
136	71.300	9.700	309.900	390.900	8.701	6.940

...MISSION

COMPOSITE MATERIALS.  
ANTENNA MASTS AND MECHANICAL STRUCTURES.  
VEHICULAR AND MARINECRAFT INSTALLATIONS.  
COMPUTER AIDED DESIGN TECHNIQUES.

...CURRENT IMPORTANT PROGRAMS

MECHANICAL ENGINEERING-AIRBORNE EQUIPMENT.  
MECHANICAL ENGINEERING-GROUND EQUIPMENT.  
CRYOGENICS.  
ENVIRONMENTAL EQUIPMENT INSTALLATIONS.  
SHELTER INSTALLATIONS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ELECTROMAGNETIC CAPABILITY FOR RFI.  
ENVIRONMENTAL CONTROL-PHYSICAL AND MECHANICAL.  
AIRCRAFT VIBRATION MEASUREMENTS.  
COMPUTER AIDED DESIGN FABRICATION.  
MODEL SHOP FABRICATION-ALL CRAFTS.  
TEST AND MEASURING EQUIPMENT CALIBRATION AND REPAIRS.  
MATHEMATICAL COMPUTATIONS AND STATISTICS.

INSTALLATION TANK-AUTOMOTIVE COMMAND LABS., WARREN, MICH.

DIR. COL L.F. FELDER DEPUTY DIR. DR. W.F. BANKS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	18.362	25.892
TOTAL PROCUREMENT	10.883	3.738
TOTAL O+M	13.952	10.187
TOTAL OTHER	0.184	0.231
TOTAL ANNUAL LAB	43.381	39.246
TOTAL INHOUSE	20.963	21.031
TOTAL INHOUSE RDT+E	8.576	10.703
ANNUAL OPERATING COST	8.542	10.017

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	19	0	20	0
CIVILIAN	978	6	427	551
TOTAL	997	6	447	551

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1125	315.908	0.000	0.000	0.000	315.908	13.183	16.273

...MISSION

RESPONSIBLE FOR RESEARCH, CONCEPT, DESIGN, DEVELOPMENT, FABRICATION, ADVANCED PRODUCTION ENGINEERING, SUPPORT TO PRODUCTION, FOR PRESENT AND FUTURE VEHICLES SYSTEMS AND SUB-SYSTEMS OF TANK-AUTOMOTIVE MATERIEL AND ITS RELATED SCIENCES

...CURRENT IMPORTANT PROGRAMS

AUTOMATIC TEST EQPT FOR INTERNAL COMBUSTION ENGINE POWERED MATERIAL  
MID-RANGE AND LONG RANGE CONCEPT STUDIES CN FUTURE TRANSPORT VEHICLES  
MID-RANGE AND LONG RANGE CONCEPT STUDIES CN FUTURE TACTICAL VEHICLES  
HYBRID ENGINE DEVELOPMENT  
RIVERINE RESEARCH

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONCEPT FORMULATION  
VEHICLE SUBSYSTEM INTEGRATION  
ANALYTICAL PREDICTION OF MILITARY VEHICLE PERFORMANCE  
VEHICLE MOTION SIMULATOR  
RIVER SIMULATOR FACILITY AND LAND LOCOMOTION SOIL BINS  
POLLUTION ABATEMENT  
VEHICLE SIGNATURE PROGRAM  
VEHICULAR NOISE REDUCTION PRGRAM  
PARTICLE DYNAMICS LABORATORY  
METAL ANAL WITH MICROPROBE ELECTRON MICROSCOPE ANALYZER AND TECHNIQUES  
DEVELOPMENT OF IMPROVED ARMOR WELDING AND FABRICATION  
LOW TEMPERATURE, SHOCK AND VIBRATION TEST FACILITIES

INSTALLATION TROPIC TEST CENTER, FT. CLAYTON, CANAL ZONE

C.O. COL HYRUM DALLINGA TECH. ADV. FRANK S. MENDEZ

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.588	2.873
TOTAL PROCUREMENT	0.037	0.037
TOTAL O+M	0.008	0.013
TOTAL OTHER	1.452	1.975
TOTAL ANNUAL LAB	4.085	4.898
TOTAL INHOUSE	3.930	4.596
TOTAL INHOUSE RDT+E	2.433	2.571
ANNUAL OPERATING COST	0.494	0.611

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	164	0	10	154	
CIVILIAN	91	2	21	70	
TOTAL	255	2	31	224	

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
37210	LAB 86.218	ADMIN 59.294	OTHER 27.847	173.359	3.160	2.220

...MISSION

PLAN AND CDT ENVIRONMENTAL PHASES OF ENGR, EXPANDED SVC, INTEGRATED ENGR /SVC EVAL, CHECK, AND CONFIRMATORY TESTS. SPT TROPICAL ENVIRONMENTAL TESTS CDT BY OTHER AGENCIES. CDT RSCH IN TROPICAL ENVIRONMENTS.

...CURRENT IMPORTANT PROGRAMS

IN-HOUSE LABORATORY INDEPENDENT RESEARCH ILIR .  
DETERMINATION OF OPTIMUM TROPICAL STORAGE + EXPOSURE SITES, PHASE I AND PHASE 2. DETERMINATION OF TERRAIN FACTORS AFFECTING SEISMIC SIGNAL PROPAGATION.  
ENVIRONMENTAL MAPPING OF TROPIC TEST SITES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

EVAL AND RECM AS TO TEST ITEM SUITABILITY FOR PRESCRIBED USE. RECM TO HQ USATECOM RSCH PROJ IN SPT OF ARMY RDT+E. PLAN AND SPT RDT+E ACTIVITIES FOR DOD OR OTHER GOVT AGENCIES. NATURAL TROPICAL ENVIRONMENT. FIRING RANGES NATURAL TERRAIN MOB COURSES. AMMO TEST STORAGE AND FUNCTIONING AREAS. CHEM, BIO, ELCT, AND CALIBRATION LABS. JUNGLE GRASS AND COASTAL MATL EXPOSURE SITES. JUNGLE RADIO RANGING SITES. PHOTOGRAPHIC SUPPORT FACILITIES. TECHNICAL OPERATIONS SUPPORT FACILITY, POL TANK FARM.

INSTALLATION WALTER REED ARMY INST. OF RES., WASH., D.C.

C.O. COL E.L. BUESCHER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	11.387	12.742
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	2.226	2.203
TOTAL OTHER	4.211	4.500
TOTAL ANNUAL LAB	17.824	19.445
TOTAL INHOUSE	17.824	19.445
TOTAL INHOUSE RDT+E	11.387	12.742
ANNUAL OPERATING COST	2.900	2.900

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	401	165	256		105
CIVILIAN	732	56	347		385
TOTAL	1133	221	643		490

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1170	333.200	57.500	0.000	440.700	0.000	12.276

...MISSION

PERF MED R+D AND CONDUCTS GRAD EDUC IN FLD OF MED, VET MED + APPLIED MED SCI. SERVES AS CONSULTING AND DIAGNOSTIC REF LAB FOR ARMY. PROV ADVISORY SVC ON PROB OF EPIDEMIOLOGY IN MIL MED + ALLIED FLD. PROV TECH QLTY CONTL OF BIO PROD DEV. PRODC + DISTR BIO PROD NOT AVAIL COM SOURCES

...CURRENT IMPORTANT PROGRAMS

DISCOVER EFFECTIVE PREVENTIVE AND TREATMENT AGENTS FOR DRUG REFRACTORY MALARIA. DEVELOP MODES OF CONTROL OF MENINGOCOCCAL AND OTHER RESPIRATORY DISEASES OF RECRUITS. DEFINE THE ECOLOGY OF DRUG ABUSE IN SOLDIERS. IMPROVE BLOOD LINES AND PERFORMANCE OF MILITARY DOG. DEVELOP IMPROVED SURGICAL MANAGEMENT OF SEVERELY INJURED COMBAT CASUALTIES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

RESEARCH, TEACHING, AND REFERENCE LABORATORY SERVICES SUMMARIZE MAJOR FUNCTIONS IN THE AREAS OF PREVENTIVE MEDICINE, INFECTIOUS DISEASES, SURGERY, NEUROPSYCHIATRIC DISEASES, INTERNAL MEDICINE, MEDICAL CHEMISTRY AND BASIC MEDICAL SCIENCES. HIGHLY SOPHISTICATED MEDICAL EQUIPMENT IN ALL AREAS OF INVESTIGATION, ELECTRON MICROSCOPES, AUTOMATED CHEMICAL ANALYSIS SYSTEMS, CHEMICAL TYPEWRITERS, BEHAVIORAL RESEARCH INSTRUMENTATION. THE WRAIR MAINTAINS LABORATORY AND RESEARCH FACILITIES AT FT. MEADE, MD, EDGEWOOD ARSENAL, MD, AND SEATO HQ, BANGKOK, THAILAND. THE WRAIR IS CAPABLE OF CONDUCTING RESEARCH IN A VAST NUMBER OF AREAS.

INSTALLATION WATERVLIET ARSENAL LABS., WATERVLIET, N.Y.

C.O. COL CHRISTOPHER MAGGIO TECH. DIR. DR. ROBERT E. WEIGLE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	6.737	7.257
TOTAL PROCUREMENT	6.730	2.551
TOTAL O+M	1.334	0.765
TOTAL OTHER	1.391	0.025
TOTAL ANNUAL LAB	16.192	10.606
TOTAL INHOUSE	15.502	9.240
TOTAL INHOUSE RDT+E	6.170	6.086
ANNUAL OPERATING COST	3.223	3.280

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	4	1	3	1
CIVILIAN	452	42	169	283
TOTAL	456	43	172	284

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
4	216.559	23.250	0.000	239.809	2.365	3.436

...MISSION

DESIGN + DEV ARTILLERY, TANK, AIR DEFENSE + SECONDARY CANNON ABOVE 20MM  
+ SPARE PARTS SUCH AS BREECH MECH S, MUZZLE DEVICES, BCRE EVACUATORS +  
SCAVENGERS + AUTOLOADERS, SYS MGT, DESIGN + DEV OF MORTARS + REC RIFLES.  
CONDUCT BASIC + APPL RESEARCH + MFG TECH TO SPT THE DEVELOPMENT MISSION

...CURRENT IMPORTANT PROGRAMS

DEV OF 152MM XM150 GUN-LAUNCHER, MAIN ARMAMENT FOR XM70 MAIN BATTLE TANK  
DEV OF LIGHT WEIGHT COMPANY MORTAR SYSTEM  
APPL OF FRACTURE MECH S TO FATIGUE LIFE PREDICTIONS FOR CANNON TUBES  
DEV OF CANNON, 155MM HOW XM199 FOR 155MM FOW XM198. DEV OF COMPOSITE  
SYSTEMS WITH METAL MATRICES + INORGANIC FIBERS FOR HI-TEMP APPLICATIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

UNIQUE FACILITIES + CAPABILITIES INCLUDED HIGH PRESSURE METALLURGY WITH  
20-30 K-BAR FLUID EXTRUSION PRESS, WHISKER GROWTH + TEST, NEUTRON ANALYSIS  
ISOTOPE COUNTING, DYNAMIC TEST OF BREECH COMPONENTS + TUBE SECTIONS FULL  
SIZE BY PRESSURE-PULSE SIMULATING FIRING LOADS, EXP STRESS ANALYSIS THRU  
2+3 DIMENSIONAL PHOTOELASTICITY, COMP. MAT LS ELECTRODEPOSITION VACUUM  
COATER + ELECTRON-BEAM VAPOR-DEPOSITION ENCLOSED PROOF RANGE 20MM MAX,  
ELECTRON MICROSCOPY 2.3 ANGSTROM S RESOLUTION + 250000X MAG, CRYOGENICS  
HELIUM DEWAR APP TO TEMPS OF 4 KELVIN, HI-PERFORMANCE SHOCK TEST 1200  
LBS TO 1500 G S FOR GUN COMPONENTS, HI-TEMP VACUUM FURNACE 3000 C MAX,  
TIME OF FLIGHT MASS SPECTROMETER, 20000 GAUSS MAGNET FOR TEST OF HIGH +  
CRYOGENIC TEMP SPECIMENS, ELECTROPLATING, ANODIZING + TITANIUM HARD COAT  
PROCESSES, ELECTRON MICROPROBE ANALYZER 8-UR IN PPM, IBM 360-44 COMPUTER

INSTALLATION WHITE SANDS MISSILE RANGE, WHITE SANDS, N.M.

C.O. MAJ GEN E.H. DESAUSSURE TECH. DIR. DR. R.H. DLNCAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	93.977	94.788
TOTAL PROCUREMENT	5.794	5.563
TOTAL O+M	1.080	1.080
TOTAL OTHER	7.142	7.353
TOTAL ANNUAL LAB	107.993	108.784
TOTAL INHOUSE	88.096	91.967
TOTAL INHOUSE RDT+E	74.245	78.277
ANNUAL OPERATING COST	23.502	22.880

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	1330	4	271		359
CIVILIAN	3640	8	564		3076
TOTAL	4970	12	1535		3435

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
3622273	LAB	ADMIN	OTHER	4621.510	162.286	137.866
	1421.093	393.289	2807.128			

...MISSION

MISSION-OPERATE A NATIONAL MISSILE RANGE FOR SUPPORT OF ALL APPROVED MISSILE AND RELATED TEST PROGRAMS, INDEPENDENTLY TEST AND EVALUATE ARMY MISSILE AND ROCKET SYSTEMS, AND ENGINEER AND DEVELOP RANGE INSTRUMENTATION SYSTEMS FOR GATHERING TEST DATA

...CURRENT IMPORTANT PROGRAMS

PULSE-DOPPLER RADAR APPLICATIONS  
DISTANT OPTICAL ATTITUDE MEASURING SYSTEM  
TRANSPONDER DEVELOPMENT  
LASER RANGING AND TRACKING SYSTEM  
COHERENT BEACON CHECKOUT SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

GROUND AND FLIGHT SAFETY, OBTAINING FLIGHT TRAJECTORY AND EVENT DATA, RECOVERING MISSILES OR PORTIONS THEREOF, REDUCING AND PUTTING INTO READABLE FORMS DATA COLLECTED BY RANGE INSTRUMENTS, ENGINEERING AND DEVELOPMENT OF RANGE INSTRUMENTATION, INDEPENDENTLY TEST AND EVALUATE ARMY WEAPONS SYSTEMS  
EVALUATE GUIDANCE AND CONTROL SYSTEMS, STRUCTURAL INTEGRITY, PROPULSION SYSTEMS, ELECTROMAGNETIC RADIATION EFFECTS, ANALYSIS OF CHEMICAL AND METALLOGRAPHIC EFFECTS, MICROBIOLOGICAL EFFECTS, CLIMATIC ENVIRONMENTAL EFFECTS, TEST AND EVALUATE WARHEADS AND SPECIAL WEAPONS, WEAPONS SIMULATION, NUCLEAR EFFECTS TESTING, COUNTER-COUNTER MEASURE TESTING, ELECTRONIC AND OPTICAL TRACKING SENSORS AND DATA TRANSMISSION REQUIRED TO PROVIDE TEST DATA ON MISSILES AND RELATED PROGRAMS

INSTALLATION YUMA PROVING GROUND, YUMA, ARIZ

C.O. COL NORMAN L. ROBINSON TECH. ADV. FLOYD E. WATTS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	9.437	10.571
TOTAL PROCUREMENT	8.948	10.620
TOTAL O+M	2.311	0.775
TOTAL OTHER	4.661	4.958
TOTAL ANNUAL LAB	25.357	26.932
TOTAL INHOUSE	25.357	26.932
TOTAL INHOUSE RDT+E	9.437	10.571
ANNUAL OPERATING COST	9.221	10.541

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	
MILITARY	461	0	371	90
CIVILIAN	761	0	32	729
TOTAL	1222	0	403	819

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1043463	166.267	72.380	175.029	413.676	85.295	54.881

...MISSION

PLAN, CONDUCT, RPT ENG TEST AIRDROP MAT AND LONG RANGE TUBE ARTY  
DESERT ENVIRONMENT TEST OF ARMY MATL AS DIRECTED  
PLAN CONDUCT RPT ENG DESIGN PROC AND PCST PRCD TEST AS DIRECTED  
PLAN CONDUCT RPT ENG DESIGN TEST OF AIRCRAFT WEAPONS SYSTEM

...CURRENT IMPORTANT PROGRAMS

AIRCRAFT RECOVERY KIT  
TRUCK, 5 TON XM809 SERIES  
HET 70  
TACFIRE  
ROCKET 2.75 INCH BASE LINE ACCURACY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

BALLISTIC MEASUREMENT RANGES  
ENG TEST FACILITIES  
VEHICLE FIELD TEST FACILITIES  
TEST COURSES  
DESERT TERRAIN TEST AREAS  
CONTROLLED IMPACT TEST FACILITY  
INSTRUMENTED DROP ZONES  
RADIO TELEMTRY  
DATA PROCESSING CENTER  
RANGE TIMING  
OPTICAL PHOTO ENG FACILITIES

INSTALLATION NAVAL AEROSPACE MEDICAL RESEARCH LAB, PENSACOLA, FLA.

C.O. CAPT N.W. ALLEBACH TECH. ADV. DR. A. GRAYBIEL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	3.579	3.538
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.429	0.440
TOTAL ANNUAL LAB	4.008	3.978
TOTAL INHOUSE	4.008	3.978
TOTAL INHOUSE RDT+E	3.579	3.538
ANNUAL OPERATING COST	0.179	0.250

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	26	12	17	9
CIVILIAN	114	16	46	68
TOTAL	140	28	63	77

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
0	96.787	9.604	14.893	121.284	2.000	1.654

### ...MISSION

CONDUCT RESEARCH IN AVIATION AND SPACE MED AVIATION PSYCHOLOGY AND PHY-  
SIOLOGY EVAL AEROMED EQUIP SUPPORT NAV AIR TRNG IN SELECTION INDOC AND  
INSTR OF NONMED AVIATION PERS PROVIDE CONSULT IN AVIATION MED MATTERS

### ...CURRENT IMPORTANT PROGRAMS

PREV OF DISORIENT AND VESTIBULAR DISTURBANCES IN FLIGHT  
AVIATION PERS PROCUREMENT AND SELECTION  
RESPONSE TO IMPACT ACCELERATION  
PHYSIO EFFECTS OF NONIONIZING RADIATION  
EVAL CARDIOVASCULAR DISEASE RISK

### ...FUNCTIONS/EQUIPMENT/CAPABILITIES

FLIGHT PERS PHYSICAL FITNESS PSYCHOLOGICAL ATTITUDES AND TOLERANCE TO  
STRESS STUDIES OF FORCE ACOUSTIC ELECTROMAG RADIATION AND ATMOSPHERIC  
ENVIRONS SLOW ROTATION ROOM HUMAN DISORIENT DEVISE CORIOLIS ACCELER  
PLATFORM STILLE WERNER CHAIR SHIP MOTION STIMULATOR ELECTRON MICROSC  
SUPER CONDUCTING MAGNET LAB EQUIPPED FOR HUMAN AND ANIMAL EXPERIMENTS  
AIRCRAFT EQUIPPED FOR INFLIGHT EEG AND ECG ANIMAL HOUSING FACILITIES  
WITH OR NUIVAC 418

INSTALLATION NAVAL AEROSPACE RECOVERY FACILITY, EL CENTRO, CALIF.

C.O. CAPT CLARENCE E. RICH TECH. DIR. HOWARD C. FISH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.428	2.993
TOTAL PROCUREMENT	0.080	0.100
TOTAL O+M	0.247	0.400
TOTAL OTHER	1.280	1.700
TOTAL ANNUAL LAB	4.035	5.193
TOTAL INHOUSE	3.635	3.965
TOTAL INHOUSE RDT+E	2.028	1.765
ANNUAL OPERATING COST	1.300	1.500

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	167	1	16	151
CIVILIAN	109	0	23	86
TOTAL	276	1	39	237

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
101290	44.000	10.000	263.000	317.000	8.998	2.400

...MISSION

DEVELOP TEST EVALUATE PARACHUTES AND RELATED SYSTEMS HUMAN ESCAPE METHODS AND SYSTEMS RETARDATION AND RECOVERY SYSTEMS RESCUE SURVIVAL AND PERSONAL SAFETY EQUIPMENT SYSTEMS FOR RETARDATION AND RECOVERY OF ORDNANCE, AIRCRAFT, MISSILES AND CAPSULE ASSEMBLIES AND LOGISTIC AERIAL DELIVERY

...CURRENT IMPORTANT PROGRAMS

DECELERATION PARACHUTE FOR CLASSIFIED AERIAL ORDNANCE WEAPON  
FLIGHT PERFORMANCE TEST F-14 AND S3A ROCKET EJECTION SEAT SYSTEMS  
FLEET SUPPORT PARACHUTE MAINTENANCE PUBLICATIONS  
SUPPORT MCDEC SPIE SYSTEM QUAL AID PROTOTYPE PRODUCTION  
CONDUCT EVAL AND TRAINING DEFINITION MARS IN FLIGHT DRONE RECOVERY SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

LEAD LAB RDT PERSONNEL RECOVERY AND RETARDATION SYSTEMS  
DIRECT FLEET SUPPORT INCL IN-SERVICE ENGRG REURS ON ASSIGNED EQUIPMENTS  
PROVIDE TECH ASST AND LAND AND WATER TEST RANGE SUPPORT NOL WHITE OAK  
PROVIDE INSTRUMENTED RANGES AND FLIGHT TEST SUPPORT NAVAIR CONTRACTORS  
PROVIDE PHOTO INDUST SHOPS MAT LAB SUPPORT 6511TH PER DODJPTF DIRECTIVE  
ON-SITE QUAL ASSURANCE SUPPORT NASA PARAWING PROJECTS  
PROVIDE TECH ASST NWC RE DEV 8 QUAL BIOMED PHYSIOLOGICAL INSTRUMENTATION  
SUPPORT NAVAIRDEVCON RE ESCAPE SYSTEMS AND SEARCH RESCUE AND SURVIVAL  
EQUIPMENT DEV SYSTEM INTEGRATION AND FLIGHT TEST  
DTE RELATED PARACHUTE GROUND SUPPORT EQUIP AND INSTALLATIONS  
EFFECT PARACHUTE/COMPONENTS STANDARDIZATION OF SPEC DRAWINGS AND PUBS  
AS CFA DIRECT AND FUND RELATED PFA EFFORTS AS REQUIRED

INSTALLATION NAVAL AIR DEVELOPMENT CENTER, JOHNSVILLE, PA.

C.O. CAPT B. MC CAULLEY TECH. DIR. G.L. HOLLINGSWORTH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	51.269	85.770
TOTAL PROCUREMENT	18.295	11.669
TOTAL O+M	6.981	7.657
TOTAL OTHER	6.581	6.079
TOTAL ANNUAL LAB	93.126	111.175
TOTAL INHOUSE	57.711	63.405
TOTAL INHOUSE RDT+E	36.316	45.298
ANNUAL OPERATING COST	12.647	12.826

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	
MILITARY	427	13	78	349
CIVILIAN	2496	23	1049	1447
TOTAL	2923	41	1127	1796

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
750	883.839	55.671	413.524	1353.034	22.163	37.897

...MISSION

CONDUCT RESEARCH, DESIGN, DEV, TEST AND EVAL OF AERONAUTICAL SYSTEMS AND COMPONENTS PERFORM RESEARCH AND DEV IN AVIATION MEDICINE

...CURRENT IMPORTANT PROGRAMS

SHIP AIR SYSTEMS INTEGRATION SASI  
LIGHT AIRBORNE MULTI-PURPOSE SYSTEMS LAMPS  
ADVANCED ACOUSTIC SENSORS  
HELICOPTER SENSOR SYSTEMS  
AIRCREW LIFE SUPPORT SYSTEMS, PROTECTIVE CLOTHING AND DEVICES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

RSH, DESIGN, DEVELOP, TEST, LAB AND FLIGHT EVAL, LONG-RANGE AIR WARFARE STUDIES, THEORETICAL ANALY, ENGIN ANAL AND FEAS PROTOTYPE DEVELOP OF SYS IN ABN ASW, ATTACK CARRIER WARFARE AND OCEAN SURVEILLANCE ENGIN ANAL ON AERO SYSTEM COMP AND AREAS OF TECHNOLOGY IN ABN ASW SYSTEMS COMMUNICATIONS, NAVIG, DIGITAL COMPUTATION, COUNTERMEAS, AEW, FC, AERCSpace MED, BIOPHYSICAL EFFECTS OF ACCELERATION, HUMAN FACTORS, AIRCREW PERSONAL AND SAFETY EQUIP SPEC A/C CONFIG CONTROL SYSTEM, ABN WEAPONS HAND EQUIP, ABN PHOTO EQUIP, MATERIALS AND PROCESSES USED IN A/C AIRFRAME STRUCTURES AND SUPPORT TO OTHER ACTIVITIES AS DIRECTED.

INSTALLATION NAVAL AIR ENGINEERING CENTER, PHILADELPHIA, PA.

C.O. CAPT C.T. FROSCHER TECH. DIR. J.M. DUNFORD

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	8.085	7.550
TOTAL PROCUREMENT	43.610	40.195
TOTAL O+M	20.724	19.154
TOTAL OTHER	4.582	3.705
TOTAL ANNUAL LAB	77.001	70.600
TOTAL INHOUSE	37.545	38.780
TOTAL INHOUSE RDT+E	5.463	4.805
ANNUAL OPERATING COST	8.367	9.624

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	40	0	12	28
CIVILIAN	2184	7	361	1823
TOTAL	2224	7	373	1851

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
560	1373.426	177.625	723.209	2274.260	33.546	18.244

...MISSION

CONDUCT A PROG. OF RDT+E, SYS. INTEGRATION, LIMITED PROD N, PROCUREMENT + FLEET ENGINEERING SUPP. IN LAUNCHING, RECOVERY + LANDING AIDS FOR A/C IN NAVAL INTELLIGENCE PROCESSING SYSTEMS + IN GROUND SUPPORT EQUIP. FOR A/C, AIRBORNE WEAPON SYS. + NAVAL INTELLIGENCE PROCESSING SYS.

...CURRENT IMPORTANT PROGRAMS

SCA CONTROLS SHIP AVIATION SUPPORT CONCEPTS  
F-14 JET BLAST DEFLECTOR DEVELOPMENT  
PROGRAMMED DRUM AIRCRAFT ARRESTING GEAR  
VERSATILE AUTOMATIC SHIP TESTER  
DEMOUNTABLE JET TEST FACILITY

...FUNCTIONS/EQUIPMENT CAPABILITIES

CONDUCT RDT+E ON A/C LAUNCHING AND RECOVERY EQUIP., VISUAL LANDING AIDS, NAVAL INTELLIGENCE PROCESSING SYSTEMS, GROUND SUPPORT EQUIP. AND RELATED SYS. PROVIDE FLEET SUPPORT FOR INST LD EQUIP. DETERMINE SUPP. EQUIP. REQUIREMENTS BY PERFORMING ANALYSES OF END-ITEMS. MANAGE TEST PROGRAMS FOR EQUIP. TESTED ON VERSATILE AVIONICS SHOP TEST SYSTEM. MACHINE SHOP WITH CONVENTIONAL AND AUTOMATED MACHINE TOOLS CAPABLE OF PROTOTYPE AND LIMITED PRODUCTION. IBM 360/50 COMPUTER FOR ENGINEERING ANALYSES, LAND G MAT TEST FACILITY FOR FULL SCALE SIMULATION OF RUNWAY LOADING, TEST FACILITY FOR EVAL. OF WIRE ROPE COMPONENTS. TEST LAB FOR DEVELOPMENT TESTING OF HYDRAULIC, PNEUMATIC AND ELECTRICAL EQUIP. UNDER CONDITIONS SIMULATING FLEET USE.

INSTALLATION NAVAL AIR TEST CENTER, PATUXENT RIVER, MD.

C.O. RADM ROY M. ISAMAN TECH. DIR. JOHN B. PARADIS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	27.514	30.002
TOTAL PROCUREMENT	19.996	24.245
TOTAL O+M	5.645	5.645
TOTAL OTHER	20.180	20.399
TOTAL ANNUAL LAB	73.335	80.291
TOTAL INHOUSE	66.536	62.347
TOTAL INHOUSE RDT+E	24.851	25.341
ANNUAL OPERATING COST	13.235	12.788

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	1293	1	198	1095
CIVILIAN	2091	3	394	1697
TOTAL	3384	4	592	2792

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB ADMIN	OF SQUARE FEET OTHER	TOTAL	REAL PROP	EQUIP	
6861	741.022 186.064	3094.351	4021.437	114.073	40.634	

...MISSION

COORDINATE AND PERFORM TEST AND EVALUATION OF AIRCRAFT WEAPONS SYSTEMS, THEIR COMPONENTS AND RELATED EQUIPMENT, CONDUCT TEST PILOT TRAINING, PROVIDE TECHNICAL ADVICE AND ASSISTANCE TO BIS NASC CONTRACTORS, ETC.

...CURRENT IMPORTANT PROGRAMS

EVALUATION NEW AIRCRAFT F-14 S3A AV8A AH1J SH3DLAMPS A7 A4M EP3E A6E  
CHECKOUT ALL AIRCRAFT IN AIMS AIRSPEED/ALTIMETER SYSTEMS CHECKOUT ALL AC  
LS DEVELOPMENT + EVAL OF ASW SYSTEMS TACTICAL SUPPORT CENTER P3C CVTSC  
EVAL GROUND SUPPORT EQUIP VAST HUMAN FACTORS GRAN HUD  
ELECTRONIC WARFARE EVALS TRAM CHARGER BLUE EA6A

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DEVELOP AND TEST CONCEPTS FOR OPERATING AIRPLANES FROM CARRIERS// EVAL  
AIRCRAFT MAINTENANCE AND RELIABILITY// PERFORM ACCELERATED SERVICE TESTS  
//PERFORM ELECTROMAGNETIC COMPATIBILITY TESTS//DEVEL AND EVAL AIRCRAFT  
ELEC SYSTEMS//RESEARCH AND DEVEL AIRCRAFT INSTRUMENTATION AND DATA  
GATHERING DEVICES AND SYSTEMS//ESTABLISH STORE RELEASE ENVELOPES//  
RECOMMEND DESIGN CHANGES TO AIRCRAFT//CONDUCT NAVY PRELIM EVALS//MAJOR  
FACILITIES//CATAPULTS AND ARRESTING GEARS//INTERFERENCE TEST HANGAR//  
AVIONICS LAB//INSTRUMENTED THEODOLITE RADAR + ECM RANGE//EXTENSIVE ELEC  
AND ENVIRONMENTAL LABS//EXTENSIVE INSTRUMENTATION, TELEMETRY, AND  
COMPUTER CAPABILITY//ENGINE TEST CELLS//CVER 120 TEST AIRCRAFT//LONG  
RUNWAYS//AIRCRAFT WEIGHING SCALES//HYDROFOIL SEAPLANE TEST CAPABILITY//  
SURFACE EFFECTS SHIPS TEST FACILITIES.

INSTALLATION NAVAL AIR TEST FACILITY, LAKEHURST, N. J.

C.O. CAPT CHARLES L. AXELL TECH. DIR. NICHOLAS IVANOVIC

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.028	0.820
TOTAL PROCUREMENT	3.350	2.337
TOTAL O+M	3.801	3.294
TOTAL OTHER	1.538	1.168
TOTAL ANNUAL LAB	9.717	7.619
TOTAL INHOUSE	8.838	7.613
TOTAL INHOUSE RDT+E	0.968	0.814
ANNUAL OPERATING COST	4.159	3.507

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	155	0	8	147
CIVILIAN	414	0	75	339
TOTAL	569	0	83	486

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
2500	59.204	30.498	91.906	181.608	33.801	7.132

...MISSION

TO CONDUCT TESTS AND EVAL OF LAUNCHING RECOVERY AND VISUAL LANDING AIDS SYSTEMS AND RELATED EQUIPMENT PROVIDE TEST SITES FACILITIES FOR DEV TEST OF SI EQUIPMENT CONDUCT R AND D OF EQUIP AND INSTR USED IN TEST AND EVALUATION OF SI EQUIPMENT

...CURRENT IMPORTANT PROGRAMS

EVAL OF INTEGRATED CATAPULT CONTROL STATION  
HELICOPTER SUPPORT TEST AND EVALUATION CENTER  
CVAN-68 JET BLAST DEFLECTOR DEV AND EVAL PROGRAM  
CVAN-68 FLUSH DECK NOSE GEAR LAUNCH DEV AND EVAL PROGRAM  
CVAN-68 DEV AND EVAL PROGRAM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CARRIER CONFIGS DUPLICATED AND SERV OPS SIMULATED WITH NAVAL ACFT  
CAT DEV FAC SHIPBOARD USED TO DEV EVAL NEW ACFT-CARRIER LAUNCH SYSTEMS  
CAT DEV FAC SHOREBASED EXPEDITIONARY CAT FOR DEV MARINE CORPS  
SATS CONCEPT AND REQUIRED ACFT LAUNCHING ACCESSORIES  
ARRESTING GEAR DEV FAC SHIPBOARD CONFIGURED TO SIMULATE STANDARD SHIPBOARD ARRESTING GEAR INSTAL MK5 MOD 3 AND MK7 MOD 1 2 AND 3  
TEST TRACK FAC 5 TO DEV AND/OR EVAL SHOREBASED AND SHIPBRD ARRS SYS  
STEAM PLANT FAC SUPPLIES HIGH PRESS STEAM TO SHIPBOARD CAT SITES  
HYDRAULIC TEST FAC CONSISTS OF TWO HYDRAULIC TEST BENCHES  
DIGITAL AND ANALOG COMPUTATIONAL FAC PROVIDES FOR SCIENTIFIC PROBLEMS SOLUTION MIS AND SCIENTIFIC DATA REDUCTION OF ACQUIRED DATA  
INSTR MAINT/CALIB FAC MOTION/STILL PHOTO CAP AND FILM DEV LAB

INSTALLATION NAVAL AIR PROPULSION TEST CENTER, TRENTON, N. J.

C.O. CAPT A.D. WILLIAMS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	8.721	13.654
TOTAL PROCUREMENT	5.438	4.000
TOTAL O+M	0.038	0.034
TOTAL OTHER	0.720	0.812
TOTAL ANNUAL LAB	14.917	18.500
TOTAL INHOUSE	12.836	8.330
TOTAL INHOUSE RDT+E	7.501	9.831
ANNUAL OPERATING COST	3.562	3.594

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	10	0	7	3
CIVILIAN	694	0	160	534
TOTAL	704	0	167	537

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
66	410.900	51.800	136.000	598.700	44.293	13.191

...MISSION

TO TEST AND EVALUATE AIRCRAFT PROPULSION SYSTEMS-THEIR COMPONENTS AND ACCESSORIES AND FUELS AND LUBRICANTS AND TO PERFORM APPLIED RESEARCH AND DEVELOPMENT LEADING TO CORRECTION OF DESIGN DEFICIENCIES AND SERVICE PROBLEMS

...CURRENT IMPORTANT PROGRAMS

XF401-PW-400 PERFORM ALT AND ENVIRONMENTAL DEVELOPMENT TEST AND EVALUATE  
TF34-GE-2 EXPLOR-QUAL TESTS FOR PERFORMANCE ALT-ENVIRONMENTAL CONDITION  
TF30-P-412 PERFORM QUAL TESTS 1AW MIL-E-5007 SPEC  
AVN FUELS AND LUBES MIL-L-23699 CHARACTERISTICS-SPEC-TESTS AND QUALS  
YT400-CP-400 ENVIRONMENTAL QUAL TESTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PROVIDE A TEST AND EVALUATION CENTER FOR AIRCRAFT PROPULSION SYSTEMS AND PROPULSION RELATED COMPONENTS. ENVIRONMENTAL CONDITIONS OF FLIGHT AND SERVICE ARE SIMULATED IN TEST CELLS-ON TEST BENCHES-OR IN THE LABORATORY THE TURBOJET-FAN-LARGE CELLS CAN SIMULATE ALTITUDES FROM SEA LEVEL TO 8000 FT WITH TEMPERATURES FROM MINUS 65 DEG TO PLUS 320 DEG F. THRUST STANDS INSTALLED ARE CAPABLE OF MEASURING THRUST TO 50000 LBS. THESE CELLS ARE FULLY CAPABLE OF TESTING THE LARGER JET ENGINES NOW IN NAVY SERVICE. THE TURBOSHAFT CELLS ARE CAPABLE OF SIMULATING ALTITUDES FROM SL TO OVER 40000 FT WITH SPECIFICATION RANGE OF TEMPERATURES. TEST CELL FACILITIES EXIST FOR COMPLETE RANGE OF SHAFT POWER ENGINES WITH SUB FACILITIES FOR TEST AND EVALUATION OF SHAFT ENGINE COMPONENTS-FUELS-LUBRICANTS-AUX POWER SYSTEMS AND ACCESSORIES

INSTALLATION NAVAL BLOOD RESEARCH LAB., N. H., CHELSEA, MASS.

C.O. CDR C.R. VALERT

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.285	0.317
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.135	0.121
TOTAL ANNUAL LAB	0.420	0.438
TOTAL INHOUSE	0.420	0.438
TOTAL INHOUSE RDT+E	0.285	0.317
ANNUAL OPERATING COST	0.045	0.045

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	9	3	4	5
CIVILIAN	13	1	2	11
TOTAL	22	4	6	16

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1	6.263	0.161	1.000	7.424	0.115	0.429

...MISSION  
CONDUCT RESEARCH AND DEV METHODS FOR LONG TERM PRESERVATION OF BLOOD AND BLOOD PRODUCTS AND EVAL OF USEFULNESS IN OPERATIONAL AREAS AND HOSPITALS

...CURRENT IMPORTANT PROGRAMS  
EVAL OF IMPROVED METHODS FOR PRESERVING RED CELLS  
EVAL OF IMPROVED METHODS FOR PRESERVING WHITE BLOOD CELLS  
EVAL OF IMPROVED METHODS FOR COMPONENT THERAPY  
EVAL OF METHODS FOR COLLECTION AND PRESERVATION OF PLATELETS  
DEV IMPROVED PROTOCOL FOR CLINICAL EVALUATION OF FROZEN BLOOD

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
PERFORM RDTANDE IN METHODS OF PRESERVING BLOOD AND BLOOD PRODUCTS  
LIQUID AND FREEZE PRESERVATION EQUIPMENT FOR RED BLOOD CELLS PLATELETS  
WHITE BLOOD CELLS PLASMA FRACTIONS EQUIPMENT TO EVAL VIABILITY AND  
FUNCTION OF BLOOD AND BLOOD PRODUCTS

INSTALLATION NAVAL CIVIL ENGINEERING LABORATORY, PORT HUENEME, CAL.

C.O. CAPT E.M. SAUNDERS TECH. DIR. WILLIAM F. BURKART

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	5.773	8.008
TOTAL PROCUREMENT	1.143	1.213
TOTAL O+M	3.782	3.358
TOTAL OTHER	1.295	0.491
TOTAL ANNUAL LAB	11.993	13.072
TOTAL INHOUSE	9.547	9.916
TOTAL INHOUSE RDT+E	4.439	6.006
ANNUAL OPERATING COST	1.678	1.675

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	15	1	7	8
CIVILIAN	390	31	190	200
TOTAL	405	32	197	208

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
22	120.352	21.977	31.548	173.877	5.118	3.064

...MISSION

TO CONDUCT RESEARCH + TO DEVELOP TEST + EVALUATE TECHNIQUES, EQUIPMENT MATERIAL + STRUCTURES BEST SUITED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF FACILITIES FOR ADVANCED BASES. AMPHIBIOUS FORCES, SEAFLOOR OPERATIONS AND THE NAVY SHORE ESTABLISHMENT.

...CURRENT IMPORTANT PROGRAMS

NAVAL SHORE FACILITIES SUPPORT. NAVY SEAFLOOR INSTALLATIONS. AMPHIBIOUS + ADVANCED BASE TECHNOLOGY, ENVIRONMENTAL PROTECTION. ORGANIC MATERIALS. MATERIAL CONTROL DISTRIBUTION + STORAGE COMBAT CONSTRUCTION + UTILITY TECHNOLOGY, TEST EQUIP. TECHNOLOGY. DEEP OCEAN TECHNOLOGY. DEVELOPMENTS ASSIGNED BY SUPT OF SALVAGE. RDT+E FOR SANGUINE + NUCLEAR PROTECTION.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DEEP OCEAN SIMULATION FACILITY WITH 72 INCH INSIDE DIAMETER BY 10-FT DEEP PRESSURE VESSEL SUSTAINING PRESSURES UP TO 5500 PSI DIVING LOCKER + EQUIPMENT FOR TEN DIVERS, SEAFLOOR SOILS LABORATORY MATERIAL SCIENCE SOLID STATE, METALLURGICAL, PHOTOELASTIC SNOW + ICE LABS. PHOTOGRAPHIC FACILITY ENVIRONMENTAL PROTECTION MONITORING CAPABILITY CDC-8090 COMPUTER/TERMINAL WITH A HIGH SPEED CARD READER + LINE PRINTER DIGITAL MAG TAPE + PAPER TAPE T/O, ANALOG TAPE, ADC + DAC CONVERSION + A PEN PLOTTER + TIE WITH CDC-6600 UNDERSEA DIVER CONSTRUCTION VEHICLES CAV, BTV + NEMO WARPING TUG CORER FOR TAKING UNDISTURBED SAMPLES AT WATER DEPTHS TO 6000 FT INSTITU TESTING EQUIPMENT FOR DEEP OCEAN INCLUDING A VANE SHEAR DEVICE, CONE PENETOMETER, 10 FT CORER, PLATE BEARING TEST DEVICE AND FOUNDATION MONITOR

INSTALLATION NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.

C.O. CDR J.L. POOR

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.613	0.558
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.578	0.607
TOTAL OTHER	0.026	0.022
TOTAL ANNUAL LAB	1.217	1.185
TOTAL INHOUSE	1.217	1.185
TOTAL INHOUSE RDT+E	0.613	0.558
ANNUAL OPERATING COST	0.120	0.162

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	1	0	1	0
CIVILIAN	66	0	24	42
TOTAL	67	0	25	42

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
2	LAB	ADMIN	OTHER			
	10.000	7.000	3.000	20.000	0.275	0.500

...MISSION  
CONDUCT RESEARCH, DEVELOPMENT, TEST AND EVALUATION AND GIVE ENGINEERING SUPPORT IN CLOTHING, TEXTILES AND RELATED FIELDS ASSOCIATED WITH SERVICE CLOTHING AND ENVIRONMENTAL AND SPECIAL PROTECTIVE CLOTHING

...CURRENT IMPORTANT PROGRAMS  
STATIC ELECTRICITY PROPENSITY OF NAVY CLOTHING  
DAMAGE CONTROL SUIT SYSTEM  
TRI-SERVICE FIRE FIGHTERS CLOTHING  
DECOMPRESSION CHAMBER FIRE RESISTANT CLOTHING  
NAVY ROCKET PROPELLANT PROTECTIVE CLOTHING

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
MAJOR FUNCTIONS  
CONDUCT RDT+E IN TEXTILE MATERIALS, LEATHER, PLASTICS, AND RUBBER  
DEVELOP NAVY CLOTHING, ACCESSORIES, AND RELATED ITEMS  
CONDUCT STUDIES IN ENVIRONMENTAL SCIENCES AND LIFE SUPPORT SYSTEMS  
PREPARE SPECIFICATIONS FOR CLOTHING, TEXTILES, FOOTWEAR AND RELATED ITEMS  
COORDINATE STANDARDIZATION IN CLOTHING AREAS  
PROVIDE TECHNICAL SUPPORT TO ALL DOD AGENCIES IN NAVY CLOTHING AREAS  
MAJOR EQUIPMENT AND FACILITIES  
TEXTILE LABORATORIES  
COLD TEST CHAMBERS  
HYDRO-ENVIRONMENT SIMULATOR  
HIGH INTENSITY THERMAL TEST UNIT

INSTALLATION NAVAL DENTAL RESEARCH INST., NTC, GREAT LAKES, ILL  
 C.O. CAPT KIRK C. HOERMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.287	0.439
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.012	0.000
TOTAL OTHER	0.192	0.270
TOTAL ANNUAL LAB	0.491	0.705
TOTAL INHOUSE	0.491	0.705
TOTAL INHOUSE RDT+E	0.287	0.439
ANNUAL OPERATING COST	0.029	0.030

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	18	8	12	6
CIVILIAN	12	2	7	5
TOTAL	30	10	19	11

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	6.997	0.897	8.664	16.558	0.000	0.319

...MISSION  
 CONDUCT RESEARCH IN DENTAL PROBLEMS OF ORAL HEALTH IN NAVAL AND MARCORP  
 PERSONNEL AND DELIVERY OF DENTAL CARE

...CURRENT IMPORTANT PROGRAMS  
 ORAL HEALTH OF NAVAL PERSONNEL  
 CHEM AND ENZYMOLOGY OF CARRIES IN CARRIES IMMUNE RECRUITS  
 BACTERIOLOGY OF SALIVA AND PLAQUE OF CARRIES IMMUNE RECRUITS  
 SELF SUPPORTED MOBILE DENTAL VAN FOR FIELD AND GARRISON  
 BIOCHEM STUDIES OF ORAL FLUID

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 ASSESS DENTAL-HEALTH STATUS OF RECRUITS IMPROVE DISEASE PREVENTION AND  
 CARE PROCEDURES INCREASE QUALITY AND QUANTITY OF CARE IN COMBAT TROOPS  
 INCLUDING FACIAL INJURIES DEFINE ORAL DISEASE ETIOLOGY AND DEVELOPMENT  
 OF SAFE THERAPEUTIC METHODS COMPUTERIZE LOCAL DENTAL MANPOWER AND  
 RESOURCES MANAGEMENT EXPLORE USE OF RAPID DIAGNOSES FROM LUMINESCENCE OF  
 BIOLOGICAL MATERIAL AMINO ACID ANALYZER SPECTROPHOTOFUOROMETER 4K  
 MEMORY CORE COMPUTER PROGRAMMED CLIMATE ROOM MOBILE DENTAL TREATMENT  
 UNIT ELECTRON MICROSCOPY AND STEREOSCANNING BACTERIAL TAXONOMY SMALL  
 MOLECULE CHARACTERIZATION VACCINE PRODUCTION AND TESTING PATIENT  
 MOTIVATION BEHAVIOR DENTAL EQUIP DESIGN AND FABRICATION

INSTALLATION NAVAL ELECTRONICS LABORATORY CENTER, SAN DIEGO, CALIF.

C.O. CAPT N.D. HARDING, JR. TECH. DIR. CR. C.E. BERGMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	37.668	39.720
TOTAL PROCUREMENT	3.974	5.581
TOTAL O+M	7.822	8.662
TOTAL OTHER	6.811	5.589
TOTAL ANNUAL LAB	56.275	59.552
TOTAL INHOUSE	52.000	54.627
TOTAL INHOUSE RDT+E	34.653	36.545
ANNUAL OPERATING COST	10.716	12.812

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	
MILITARY	118	3	98	20
CIVILIAN	1455	54	700	755
TOTAL	1573	57	798	775

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OF SQUARE FEET OTHER	TOTAL	REAL PROP	EQUIP
1987	457.011	152.725	225.883	835.619	11.898	33.971

...MISSION

TO CONDUCT A PROGRAM OF WARFARE ANALYSIS, RESEARCH, DEVELOPMENT, TEST, EVALUATION, SYSTEMS INTEGRATION AND FLEET ENGINEERING SUPPORT IN COMMAND CONTROL AND COMMUNICATIONS TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS

OPERATIONAL APPLICATIONS OF ELECTRO-OPTICS.  
MESSAGE PROCESSING AND DISTRIBUTION SYSTEM FOR CVAN 68.  
IMPROVEMENT OF FBM SUBMARINE COMMUNICATIONS.  
SYSTEM CONCEPTS FOR INTEGRATED WORLD WIDE OCEAN SURVEILLANCE SYSTEM.  
SATCOM FLEET BROADCAST AND SATELLITE DIGITAL DATA LINK

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FUNCTIONS ASSURE MAXIMUM RDT+E CONTRIBUTIONS TO OPERATIONAL CAPABILITY IN COMMAND CONTROL AND COMMUNICATIONS THRU STRONG TECHNICAL DIRECTION, COORDINATION OF DESIGNATED NAVY COMMAND AND CONTROL PROGRAMS. DEVELOP A BALANCED INTEGRATED PROGRAM OF WARFARE ANALYSIS, RESEARCH, DEVELOPMENT, TEST, EVALUATION, SYSTEM INTEGRATION, AND FLEET ENGINEERING SUPPORT. DEVELOP AN OPTIMUM SCIENTIFIC AND PHYSICAL ENVIRONMENT FOR THE ADVANCEMENT OF COMMAND CONTROL AND COMMUNICATIONS TECHNOLOGY. FACILITIES-ADVANCED COMPUTER SCIENCE CENTER, MICROELECTRONICS LAB, ENVIRONMENTAL TEST FACILITY, LASER RESEARCH LAB, SIXTY FOOT DIA RADIO TELESCOPE, ANTENNA MODEL RANGES, HUMAN FACTORS LAB, SYSTEMS EVALUATION FACILITIES, EX USS BUNKER HILL SYSTEMS TEST BED.

INSTALLATION NAVY ELECTRONIC SYST.TEST+EVAL.FAC,PAXUTENT RIVER, MD.

C.O. CDR R.V. WILSON TECH. DIR. R.E. WAXMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.708	1.615
TOTAL PROCUREMENT	0.772	1.432
TOTAL O+M	3.718	4.476
TOTAL OTHER	0.865	0.689
TOTAL ANNUAL LAB	7.063	8.217
TOTAL INHOUSE	7.063	8.217
TOTAL INHOUSE RDT+E	1.708	1.615
ANNUAL OPERATING COST	0.518	0.618

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	32	0	6	26
CIVILIAN	156	0	71	85
TOTAL	188	0	77	111

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
852	22.944	2.502	14.195	39.641	3.342	4.518

...MISSION

MISSION TO PROVIDE TECHNICAL SUPPORT AND SERVICES ON ELECTRONIC SYSTEMS AND EQUIPMENTS AND PERFORM OTHER TASKS AS ASSIGNED BY THE COMMANDER, NAVAL ELECTRONIC SYSTEMS COMMAND.

...CURRENT IMPORTANT PROGRAMS

IFF AIMS TEST, EVALUATE, AND CERTIFICATION OF EQUIPMENT/SYSTEMS.  
ACLS TEST, EVALUATION, CERTIFICATION OF SHIP SYSTEMS.  
COMMUNICATIONS T + E OF SHIPBOARD, SHORE, SATELLITE COMMUNICATIONS.  
NAVIGATIONAL AIDS T + E OF TACAN, GCA BEACONS.  
RADAR T + E. OF SEARCH, PRECISION TACTICAL RADARS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOR FUNCTIONS T+E OF ELECTRONIC EQUIPMENTS/SYSTEMS, DEVELOP SPECIFICATIONS, MONITOR PROCUREMENT SELECT CONTRACT PROPOSALS, PROVIDE CONSULTATION ASSISTANCE WHEN REQUESTED.  
MAJOR EQUIPMENTS IFF AIMS, ACLS, TACAN, GCA, RADAR, HF COMMUNICATIONS, SATELLITE COMMUNICATIONS.  
FACILITY CAPABILITIES COMPLETE LABORATORY OPERATIONAL, ENVIRONMENTAL TEST AND EVALUATION OF ASSIGNED EQUIPMENTS, SYSTEMS, COMPLETELY EQUIPPED WITH STANDARD AND SPECIAL PURPOSE EQUIPMENT.

INSTALLATION NAVAL ENVIRON PREDICTION RSCH. FACILITY MONTEREY, CAL.

C.O. CDR G.D. HAMILTON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.000	0.68E
TOTAL PROCUREMENT	0.000	0.022
TOTAL O+M	0.000	0.002
TOTAL OTHER	0.000	0.077
TOTAL ANNUAL LAB	0.000	0.767
TOTAL INHOUSE	0.000	0.691
TOTAL INHOUSE RDT+E	0.000	0.612
ANNUAL OPERATING COST	0.000	0.845

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	
MILITARY	4	1	3	1
CIVILIAN	20	0	8	12
TOTAL	24	1	11	13

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	0.806	0.843	6.351	8.000	2.000	0.070

...MISSION

CONDUCT RESEARCH AND DEVELOPMENT, DIRECTED TOWARDS PROVIDING EFFECTIVE LOCAL AND REGIONAL ENVIRONMENTAL ANALYSIS AND PREDICTION TECHNIQUES AND PROVIDE PLANNING, MODELLING AND EVALUATION SERVICES FOR THE NAVAL WEATHER MODIFICATION PROGRAM.

...CURRENT IMPORTANT PROGRAMS

COMPUTER SIMULATION OF FOG/CLOUD AND PRECIP MICROPHYSICAL PROCESSES.  
IMPROVED TYPHOON MOVEMENT PREDICTION TECHNIQUES.  
IMPROVED MEDITERRANEAN WEATHER PREDICTION TECHNIQUES.  
IMPROVED WEATHER DATA PRESENTATION METHODS.  
HYDRODYNAMICAL NUMERICAL MODELLING OF WATER LEVELS AND CURRENTS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT PROGRAM OF RESEARCH AND DEVELOPMENT IN LOCAL AND REGIONAL ENVIRONMENTAL ANALYSIS AND PREDICTION TECHNIQUES. PROVIDE PLANNING, MODELLING AND EVALUATION SERVICES FOR NAVY WEATHER MODIFICATION PROGRAM. DEVELOP TECHNIQUES AND EQUIPMENT FOR THE INTERPRETATION, DISPLAY, AND APPLICATION OF ENVIRONMENTAL DATA AND INFORMATION AT THE OPERATIONAL LEVEL. MAINTAIN COGNIZANCE OF NAVY REQUIREMENTS AND PROVIDE APPROPRIATE RECOMMENDATIONS FOR APPLICATIONS OF NEW DEVELOPMENTS IN ENVIRONMENTAL SCIENCES WHICH WILL IMPROVE ENVIRONMENTAL SUPPORT TO THE NAVY. MAINTAIN A TECHNICAL LIBRARY OF ENVIRONMENTAL PUBLICATIONS AND INFORMATION. MAINTAIN LABORATORY FOR METEOROLOGICAL ANALYSES AND DRAFTING FACILITIES TO SUPPORT INTERNAL OPERATIONS.

INSTALLATION NAVAL EXPL. ORD. DISPOSAL FAC., INDIAN HEAD, MD.

C.O. CDR BOBBY J. BROWN TECH. DIR. LIONEL A. DICKENSON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.927	1.358
TOTAL PROCUREMENT	1.990	1.944
TOTAL O+M	0.066	0.002
TOTAL OTHER	0.194	0.020
TOTAL ANNUAL LAB	3.177	3.324
TOTAL INHOUSE	2.283	2.074
TOTAL INHOUSE RDT+E	0.756	0.800
ANNUAL OPERATING COST	0.550	0.751

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	
MILITARY	65	0	3	62
CIVILIAN	132	0	15	117
TOTAL	197	0	18	179

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1084	33.151	17.287	70.551	120.989	4.707	1.055

...MISSION

CONDUCT RDT+E IN TECHNICAL MATTERS CONCERNING EOD+RENDER SAFE PROCEDURES FOR CONVENTIONAL AND SPECIAL WEAPONS+GUIDED MISSILES,B+C MUNITIONS,TOOLS, EQUIPMENT,TECHNIQUES,US AND FOREIGN AS REQUIRED TO DISCHARGE NAVY RESPONSIBILITIES TO DOD,AF,ARMY IN MATTERS OF EOD

...CURRENT IMPORTANT PROGRAMS

RDT+E EXPLOSIVE ORDNANCE DISPOSAL PROCEDURES  
PUBS PROMULGATING DEVELOPMENT STATUS OF EOD EQUIPMENT FOR PROCEDURES  
ADVANCED DEVELOPMENT OF EOD EQUIPMENT  
IN-SERVICE ENGINEERING FOR EOD EQUIPMENT  
ADMINISTER EOD ALLOWANCE LIST FOR PUBS AND EQUIPMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DEVELOP EOD PROCEDURES,TECHNICALLY MANAGE AVAILABILITY OF REQUIRED EOD EQUIPMENT,PREPARE PUBS FOR JOINT SERVICES DEVELOP EQUIPMENT REQUIRED TO PERFORM EOD PROCEDURES.

LIBRARY FOR ORDNANCE DATA,MAGAZINES FOR ORDNANCE STORAGE,FACILITIES FOR ORDNANCE DISASSEMBLY,X-RAY AND RADIOISOTOPIC RADIOGRAPHY BUILDING,PHOTO LAB,SURFACE TEST RANGES,UNDERWATER TEST TANK,MAGNETIC EFFECTS FACILITY, MACHINE SHOP,CARPENTER SHOP,ELECTRONIC SHOP

INSTALLATION NAVAL MEDICAL FIELD RESEARCH LAB., CAMP LEJEUNE, N.C.

C.O. CAPT JESSE F. ADAMS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.700	0.868
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.304	0.355
TOTAL ANNUAL LAB	1.004	1.223
TOTAL INHOUSE	1.004	1.223
TOTAL INHOUSE RDT+E	0.700	0.868
ANNUAL OPERATING COST	0.170	0.190

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	29	7	9	20
CIVILIAN	52	3	12	40
TOTAL	81	10	21	60

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
3	28.226	8.655	15.590	52.471	0.490	0.600

...MISSION  
CONDUCT R AND D IN MED AND DENT AND ALLIED FIELDS WITH EMPHASIS ON FIELD  
AND AMPHIBIOUS MEDICINE

...CURRENT IMPORTANT PROGRAMS  
PREV OF HEMOLYSIS CAUSED BY  $CSO_4$  TREAT OF PHOSPHORUS BURNS  
PHYSIOLOGIC IMPAIRMENT DUE TO CB PROT CLOTHING IN AMPHIB LANDING  
ETIOLOGY OF RESPIRATORY ILLNESS IN MIL PERS  
EVALUATION OF FIELD WATER PURIFICATION SYSTEMS  
ETIOLOGY OF INFECTIOUS MONONUCLEOSIS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
CONDUCT RESEARCH IN PROBLEMS OF FIELD AND AMPHIBIOUS MEDICINE TEST MED  
EQUIP SUPPLIES CLOTHING AND EQUIP FOR MIL PERS USE  
APPLIED RESEARCH IN BACTERIOLOGY PHYSIOLOGY STRESS PHYSIOLOGY ENTOMOLO  
ENVIRON BIOLOGY VIROLOGY FIELD MEDICAL EQUIP BIOCHEM AND ANIMAL INVEST  
OLFACTOMETER BLAST FACILITY BALLISTIC RANGE HI SPEED CAMERA LAMINATE  
PRESS 2 MAN ENVIRON CHAMBER CLIMATIC CHAMBER MULTIPLEX PHYSIO DATA  
RECORDER ELECTRONIC PROGRAMMER FLUOROMETERS RESPIROMETER GAS  
PARTITIONER PYRHeliOGRAPH

INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO.1, BERKELEY, CALIF.  
 C.O. CDR J.W. FRESH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACTY + EST)
TOTAL RDT+E	0.039	0.049
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.170	0.176
TOTAL ANNUAL LAB	0.209	0.225
TOTAL INHOUSE	0.209	0.225
TOTAL INHOUSE RDT+E	0.039	0.049
ANNUAL OPERATING COST	0.001	0.002

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	16	3	7	9
CIVILIAN	3	0	1	2
TOTAL	19	3	8	11

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	0.000	0.000	0.000	0.000	0.000	0.296

...MISSION

RESEARCH ON AIRBORNE INFECTIOUS DISEASES DIRECT SUPPORT OF LO TEMP PROJ  
 DEV OF AEROSOL HAZARD CONTROL IN DENTAL CLINICS

...CURRENT IMPORTANT PROGRAMS

STUDIES ON ENVIRONMENTAL CONTROL OF RESPIRATORY DISEASE AGENTS  
 LO TEMP EFFECTS ON SUSCEPTIBILITY TO AIRBORNE INFECTIONS  
 POTENTIAL AEROSOL HAZARDS DURING DENTAL OPERATORY PROCEDUR  
 STUDY OF INFECTIONS IN HYPERBARIC CONDITIONS  
 POTENTIAL DISEASE HAZARDS TO NAVY DIVERS AND AQUANAUTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

BACTERIOLOGY MYCOLOGY BIOPHYSICS AND OTHER APPROPRIATE FIELDS RELATIVE  
 TO PARTICULAR PROBLEMS OF AIRBORNE DISEASES OF MIL IMPORTANCE STUDY OF  
 PROTEIN ELECTROLYTE LIVER CARDIOPULMONARY AND OTHER FACTORS IN HOST RES  
 PONSE TO INFECTION IMMUNOLOGIC AND PHYSIOLOGIC SUTDIES ON N MENINGITI-  
 DIS TEST AND IMPROVE PLAGUE VACCINE REFERENCE STANDARDS STUDIES ON  
 PATH AND IMMUNITY OF DISEASES DEV RAPID DIAG PROC FOR ARBO AND RESPIRA-  
 STORY VIRUSES  
 STUDY OF OCEAN POLLUTION RELATIVE TO NAVAL TECHNICAL PROGRAMS

INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO.2, TAIPEI, TAIWAN

C.O. CAPT R.H. WATTEN CHIEF SCIENTIST R.R. BLACKWELL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.376	1.335
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.600	0.519
TOTAL ANNUAL LAB	1.976	1.854
TOTAL INHOUSE	1.976	1.854
TOTAL INHOUSE RDT+E	1.376	1.335
ANNUAL OPERATING COST	0.512	0.542

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	
MILITARY	36	11	16	20
CIVILIAN	10	2	3	7
TOTAL	46	13	19	27

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
2	65.332	21.800	0.600	87.732	0.000	0.781

...MISSION

CONDUCT BASIC RESEARCH IN BIOMED SCIENCE PROVIDE DATA ON DISEASES AND  
MED PROBLEMS OF MIL SIGNIFICANCE RECOMMEND CONTROL MEASURES AND PROVIDE  
TRNG IN R AND D TECHNIQUE

...CURRENT IMPORTANT PROGRAMS

SURVEILLANCE OF INFLUENZA IN FAR EAST  
STUDIES OF FEVERS OF UNK ORIGIN  
EPIDEMIOLOGY PATH AND TREATMENT OF PHILIPPINE CAPILLARIASIS  
STUDY OF DISEASES OF MIL IMPORTANCE IN INDONESIA  
NUTRITION METABOLIC AND BIOCHEM STUDIES OF FAR EAST ETHNIC

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CLINICAL STUDY OF DIAG AND TREATMENT OF TROPICAL DISEASE AND EPIDEMIOLO-  
GICAL STUDY OF INFECTIOUS DISEASE COMPLETE RADIOISOTOPE EQUIP COMPUTER  
CAPABILITY IN CLINICAL INVESTIGATION MICROBIOLOGY MED PHYSICS MED ECO-  
LOGY BIOCHEM PATH ANIMAL FACILITY

INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO.3, CAIRO, EGYPT

C.O. CAPT H. SPARKS SENIOR SCIENTIST DR. H. HOGGSTRAAL

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1971	1972
	(ACTUAL)	(ACT + EST)
TOTAL RDT+E	1.078	0.949
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.360	0.392
TOTAL ANNUAL LAB	1.438	1.341
TOTAL INHOUSE	1.438	1.341
TOTAL INHOUSE RDT+E	1.078	0.949
ANNUAL OPERATING COST	0.300	0.310

PERSONNEL DATA (END OF FY 1971)

PERSONNEL	AUTHORIZED	TOTAL	TOTAL	NON-
	STRENGTH	PHD'S	PRCF	PROF
MILITARY	30	7	9	21
CIVILIAN	111	15	44	67
TOTAL	141	22	53	88

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP EQUIP
5	43.420	6.610	16.437	66.467	2.606 0.000

...MISSION  
RESEARCH INTO ETIOLOGY ECOLOGY DISTRIBUTION TRANSMISSION PATHOGENESIS  
PREVENTION CONTROL AND TREATMENT OF INFECTIOUS AND ENCEMIL DISEASE OF  
MIL MED INTEREST IN MIDEAST AND AFRICA

...CURRENT IMPORTANT PROGRAMS  
PATHOPHYSIOLOGY OF LOUSE BORNE RELAPSING FEVER  
IMMUNOLOGY AND ETIOLOGY OF MALARIA IN ETHIOPIA  
PATHOPHYSIOLOGY AND THERAPY OF SCHISTOSOMIASIS  
ELUCIDATE ROLE OF TICKS AS HUMAN DISEASE VECTOR  
ECOLOGY ARBOVIRUS INCLUDING YELLOW FEVER IN ETHIOPIA

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
ARBOVIRUS LAB ANIMAL PRODUCTION FACILITIES NUTRITIONAL BIOCHEM TICK  
BIOCHEM AND PHYSIOLOGY MEDICAL ZOOLOGY AND ENTOMOLOGY CLINICAL INVEST  
AND MEDICAL WARDS RICKETTSIOLOGY TISSUE CULTURE FACILITIES MENINGO-  
COCCUS AND ENTERIC BACILLI LAB VETERINARY PATHOLOGY PARASITOLOGY  
EXPERIMENTAL AND ANATOMIC PATHOLOGY

INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO.4, GREAT LAKES, ILL

C.O. CAPT R.O. PECKINPAUGH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.797	0.752
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.454	0.385
TOTAL ANNUAL LAB	1.251	1.137
TOTAL INHOUSE	1.251	1.137
TOTAL INHOUSE RDT+E	0.797	0.752
ANNUAL OPERATING COST	0.330	0.345

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	34	6	12	22
CIVILIAN	45	2	14	31
TOTAL	79	8	26	53

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
1	28.702	11.576	13.649	53.927	0.387	0.397

...MISSION

CONDUCT R AND D IN BIOMED SERVICES PROVIDE DATA ON DISEASE AND MED PROBLEMS OF MIL IMPORTANCE RECOMMEND CONTRL MEASURES FOR COMMUNICABLE DISEASE PROVIDE TRAINING IN RESEARCH TECHNIQUES

...CURRENT IMPORTANT PROGRAMS

MYCOPLASMAS ASSOCIATED WITH RESPIRATORY DISEASE AND BRONCHOPNEUMONIA  
ETIOLOGIC AGENTS OF RESPIRATORY DISEASE IN RECRUITS  
HOST STUDIES OF ILLNESS SUSCEPTIBILITY  
EVAL ANTIBACTERIAL AGENTS TO ELIMINATE MENINGOCOCCI IN NASOPHARYNX  
EVAL VARIOUS INFLUENZA VACCINE IN RECRUITS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

RESEARCH IN ETIOLOGY TRANSMISSION CONTROL AND TREATMENT OF COMMUNICABLE RESPIRATORY DISEASE AID MED ACTIVITIES IDENTIFY EPIDEMIC RESPIRATORY DISEASES STUDY MED PROBLEMS OF RECRUIT TRAIN PERS IN R AND D TECHNIQUE EQUIP-INCUBATORS REFRIGERATION UNITS ULTRACENTRIFUGE LIQUID SCINTILLATION SYSTEM OSCILLATOR SPECTROPHOTOMETERS ELECTRON SCOPE RESEARCH IN ECOLOGY AND CONTROL OF COMMUNICABLE DISEASE MICROPLASMA BACTERIOLOGY BIOCHEM BIOMETRIC EPIDEMIOLOGY IMMUNOLOGY AND VIROLOGY

INSTALLATION NAVY MED. NEUROPSYCHIATRIC RES. UNIT, SAN DIEGO, CAL.  
 C.O. CAPT R.J. ARTHUR SCIENTIFIC DIR. DR. W. WILKINS

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.890	1.015
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.239	0.304
TOTAL ANNUAL LAB	1.129	1.319
TOTAL INHOUSE	1.129	1.319
TOTAL INHOUSE RDT+E	0.890	1.015
ANNUAL OPERATING COST	0.150	0.200

PERSONNEL DATA (END OF FY 1971)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	10	9	10	0
CIVILIAN	52	8	21	31
TOTAL	62	17	31	31

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
0	11.177	4.500	0.000	15.677	2.000	0.221

...MISSION  
 CONDUCT NEUROPSYCHIATRY RESEARCH AS APPLIES TO NAVAL SERVICE

...CURRENT IMPORTANT PROGRAMS  
 LIFE STRESS AND HEART DISEASE IN HEALTHY NAVY OFFICERS + PETTY OFFICERS  
 STRESS TOLERANCE DIFFERENCES AMONG NAVAL PERSONNEL  
 DEVELOP COMPUTERIZED PSYCHIATRIC DATA SYSTEM FOR NAVAL SERVICE  
 GUIDELINES FOR PSYCHIATRIC TREATMENT AND DISPOSITION OF NAVAL PERSONNEL  
 PHYSICAL FITNESS STANDARDS PREDICTING MILITARY EFFECTIVENESS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 ANALYSIS OF UNDERWATER PSYCHOPHYSIO PROGRAMS AND TASKS  
 COMPLETE EEG COMBINED USE FOR SINGLE SEIZURE STUDY AND SLEEP DEPRIVATION  
 ON-LINE EEG RECORDING CAPABILITIES

INSTALLATION NAVAL MISSILE CENTER, POINT MUGU, CALIF.

C.O. CAPT EDELBERT E. IRISH TECH. DIR. DONALD F. SULLIVAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	22.823	32.629
TOTAL PROCUREMENT	19.715	11.354
TOTAL O+M	8.243	13.282
TOTAL OTHER	7.123	9.429
TOTAL ANNUAL LAB	57.904	66.694
TOTAL INHOUSE	44.726	54.030
TOTAL INHOUSE RDT+E	16.070	24.472
ANNUAL OPERATING COST	1.200	14.895

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	704	3	105	599
CIVILIAN	1698	7	506	1192
TOTAL	2402	10	611	1791

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
4	110.756	160.569	698.391	969.716	22.024	36.058

...MISSION

TO PERFORM TEST, EVALUATION, DEVELOPMENT SUPPORT AND EXERCISE ENGINEERING COGNIZANCE AS ASSIGNED OF NAVAL WEAPONS, WEAPON SYSTEMS AND RELATED DEVICES

...CURRENT IMPORTANT PROGRAMS

F-14A/PHOENIX DEVELOPMENT TESTING  
AIRBORNE ELECTRONIC COUNTERMEASURES R + D  
ENGINEERING COGNIZANCE OF AIR LAUNCHED WEAPONS  
AIR-TO-AIR, AIR-TO-SURFACE MISSILE PRODUCTION TESTING  
T AND E OF AERIAL AND SURFACE TARGETS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PERFORM TESTS AND CONDUCT TECH EVALUATIONS OF NAVAL AIRBORNE WEAPON SYS  
GUIDED MISSILE SUBSYSTEMS AND RELATED SUPPORT EQUIP PERFORM BIS TRIALS  
FOR INTEGRATED AIRBORNE WEAPON SYS PERFORM PROD MONITORING TESTS OF NEW  
GUIDED MISSILE LOTS PROVIDE ENG COGNIZANCE AND FIELD ENG SERVICES ON  
ASSIGNED OPERATIONAL AIRBORNE WEAPONS AND TARGETS SYSTEMS PROVIDE ENG-  
INEERING MANAGEMENT AND SUPPORT FOR EW EQUIP DURING DEV AND DEPLOYMENT  
PERFORM DEV, T + E OF AIRBORNE AND SURFACE TARGET SYSTEMS. MAJOR FACØ  
TEST OPERATIONS FAC, LABORATORY FAC INCL ENVIRONMENTAL FAC RADAR REF-  
LECTIVITY FAC ROCKET ENGINE TEST FAC INTEGRATED SYSTEMS SIMULATION FAC  
TARGET FAC, PHOTOGRAPHICS FAC INFRARED LASER AND OPTICS LAB

INSTALLATION PACIFIC MISSILE RANGE, POINT MUGU, CALIF.

C.O. RADM H.S. MOORE TECH. DIR. W.L. MILLER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	63.569	68.575
TOTAL PROCUREMENT	1.933	2.000
TOTAL O+M	5.605	5.760
TOTAL OTHER	9.499	17.335
TOTAL ANNUAL LAB	80.606	93.678
TOTAL INHOUSE	54.160	62.932
TOTAL INHOUSE RDT+E	43.337	44.945
ANNUAL OPERATING COST	22.493	23.205

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	865	6	183	682
CIVILIAN	3058	7	460	2598
TOTAL	3923	13	643	3280

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
29600	93.463	271.479	1390.796	1755.738	138.800	162.700

...MISSION

TO PROVIDE SUPPORT FOR THE DEPARTMENT OF DEFENSE AND OTHER DESIGNATED GOVERNMENT AGENCIES FOR LAUNCHING, TRACKING, + COLLECTING DATA IN GUIDED MISSILE, SATELLITE, + SPACE VEHICLE RESEARCH, DEVELOPMENT, EVALUATION, AND TRAINING PROGRAMS AND ACTUAL OPERATIONS.

...CURRENT IMPORTANT PROGRAMS

RANGE SUPPORT OF 240 NATIONAL RANGE USER PROGRAMS INCL PHOENIX + POLARIS  
DEV OF UNDERWATER TEST + EVAL RANGE IN HAWAIIAN AREA FOR ASW WEAPONS  
DEV EXTENDED AREA TRACKING SYSTEM OVER-THE-HORIZON IN CONUS AREA  
DEV OF INTEGRATED TARGET CONTROL SYSTEM ITCS FOR CONUS SITES  
DEV OF AIR COMBAT MANEUVERING TEST SYSTEM ACMTS FOR TACT WPN SYS EVAL

...FUNCTIONS/EQUIPMENT/CAPABILITIES

OPERATE NAT L RANGE FACIL AT PT MUGU CAL/SAN NICOLAS IS/KAUAI HAW/MIDWAY IS/WAKE IS/JOHNSTON IS. OPERATE UNDERWATER RANGE/KAUAI. OPERATE RANGE INSTR SHIP USNS WHEELING TAGM-8 AND 5 RANGE INSTR AIRCRAFT EC-121K . PROVIDE TRAJECTORY DATA, TELEMTRY, COMMAND CONTROL/DESTRUCT, COMM SVCS, DATA RELAY AND DISPLAY FOR CONTROL, DATA PROCESSING, ITEM RECOVERY AT SEA, TECH SVCS CALIB/REPAIR/INSTALL/MAINT , METRO + CCEANO SVCS, FREQ PROTECTION, NAVIG AIDS, LOGISTICS + BASE SUPPORT. MAJCR OP CONTROL SITES AT CONUS + BARKING SANDS, DATA PROC CENTER PT MUGU. PROBE LAUNCH COMPLEX AT PT MUGU, SAN NICOLAS IS, + KAUAI. UNDERWATER RANGE KAUAI IS 5 X 10 MI WITH 37 HYDORPHONES AT 400-1000 FATHOMS. INSTRUMENTED AREAS 0 CONUS-100 X 200 MI/HAW AREA-50 X 100 MI/JOHNSTON-100 MI RADIUS. AREA FREQ COORD JCS AT CONUS AND HAW AREA. SPEC HYDROACOUSTIC ARRAY OAHU/MIDWAY/WAKE.

INSTALLATION NAVAL ORDNANCE LABORATORY, WHITE OAK, MD.

C.O. CAPT ROBERT WILLIAMSON II TECH. DIR. DR. GREGORY K. HARTMANN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	51.384	69.994
TOTAL PROCUREMENT	14.909	10.548
TOTAL O+M	2.619	1.729
TOTAL OTHER	8.045	5.233
TOTAL ANNUAL LAB	76.957	87.504
TOTAL INHOUSE	57.295	52.887
TOTAL INHOUSE RDT+E	34.988	38.078
ANNUAL OPERATING COST	20.438	22.433

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	52	1	28	24
CIVILIAN	2847	121	1107	1740
TOTAL	2899	122	1135	1764

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB ADMIN	OF SQUARE FEET OTHER	TOTAL	REAL PROP	EQUIP	
1059	311.167 182.543	1019.410	1513.120	46.207	32.595	

...MISSION

TO CONDUCT A PROGRAM OF WARFARE ANALYSIS, RESEARCH, DESIGN, DEVELOPMENT, TEST, EVALUATION, SYSTEMS INTEGRATION AND FLEET SUPPORT PRINCIPALLY IN THE AREAS OF SURFACE AND UNDERSEA WARFARE AND TO CONDUCT INVESTIGATIONS INTO RELATED FIELDS OF SCIENCE AND TECHNOLOGY

...CURRENT IMPORTANT PROGRAMS

TORPEDO MK 48-1 DEVELOPMENT  
CAPTOR DEVELOPMENT  
HIGH ENERGY LASER RESEARCH AND DEVELOPMENT  
NUCLEAR WEAPON EFFECTS RESEARCH INCLUDING VULNERABILITY AND HARDENING  
REENTRY VEHICLES MATERIALS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

WIND TUNNELS TO MACH 20 BALLISTICS RANGES FOR FREE FLIGHT MODEL STUDIES, HYDROBALLISTIC TANK 1.75 MILLION GALLON CAPACITY FOR STUDY OF RELATIVELY LARGE MODELS AT HIGH SPEED ENTRY, CENTRIFUGE TO STUDY U/W EXPLOSIONS FACILITIES FOR TESTING AND RESEARCH IN THE CHEMISTRY OF EXPLOSIVES AND PROPELLANTS EXTENSIVE LABORATORY AND FIELD FACILITIES FOR TESTING ORDNANCE UNDER NATURAL AND/OR SIMULATED CONDITIONS  
MAGNETIC STRUCTURE FACILITY TO STUDY MAGNETIC CHARACTERISTICS OF SUBMARINES, SHIPS AND SATELLITES HIGH-ARC FACILITY CDC 6400 COMPUTER

INSTALLATION NAVAL ORD. MISSILE TEST FAC., WHITE SANDS, N. MEX.

C.O. CAPT H.E. DAVIES, JR. CHIEF ENG. DR. W.W. BCHN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.705	1.218
TOTAL PROCUREMENT	0.725	0.776
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.606	1.544
TOTAL ANNUAL LAB	4.036	3.538
TOTAL INHOUSE	3.681	3.322
TOTAL INHOUSE RDT+E	1.609	1.131
ANNUAL OPERATING COST	0.812	0.852

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	TOTAL	
MILITARY	185	2	21	164	
CIVILIAN	86	1	4	82	
TOTAL	271	3	25	246	

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
112	84.742	30.719	236.239	351.700	6.590	3.312

...MISSION

SUPPORT THE NAVY GUIDED MISSILE AND ROCKET PROGRAM INCLUDING GROUND AND FLIGHT TESTING PARTICIPATE IN THE OPERATION OF THE DEPT OF DEFENSE INTEGRATED MISSILE TEST RANGE AT WHITE SANDS

...CURRENT IMPORTANT PROGRAMS

STANDARD MISSILE 2 SLANT AEGIS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FLIGHT TEST TALOS TERRIER TARTAR STANDARD SURFACE TO AIR GUIDED MISSILES  
FLIGHT TEST STANDARD ANTI RADIATION MISSILE AIR TO SURFACE  
LAUNCH AEROBEE 150 170 AND 350 SOUNDING ROCKETS FOR UPPER ATMOS STUDY  
CONDUCT NAVY AIR WEAPON BOMB TESTS  
CONDUCT FEASIBILITY TEST FOR LOW ALTITUDE SUPERSONIC TARGET  
CONDUCT TESTS OF CLOSE IN WEAPON SYSTEM

INSTALLATION NAVAL PERSONNEL RESEARCH ACTIVITY, SAN DIEGO, CALIF.

C.O. CDR KARL E. KUEHNER TECH. DIR. DR. I. JONES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	3.204	3.933
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.055	0.051
TOTAL OTHER	0.518	0.525
TOTAL ANNUAL LAB	3.777	4.509
TOTAL INHOUSE	3.777	4.309
TOTAL INHOUSE RDT+E	3.204	3.733
ANNUAL OPERATING COST	0.360	0.365

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	35	0	35		0
CIVILIAN	163	30	99		64
TOTAL	198	30	134		64

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
1	LAB 47.300	ADMIN 4.900	OTHER 0.000	52.200	0.210	0.277

...MISSION

PLANS AND CONDUCTS RESEARCH AND DEVELOPMENT IN PERSONNEL OPERATIONS AND BEHAVIORAL SCIENCES TO DEVELOP NEW CONCEPTS AND IMPROVED METHODS FOR ACQUIRING, CLASSIFYING, TRAINING, DISTRIBUTING, AND RETAINING PERSONNEL AND FOR MAXIMIZING THE UTILIZATION OF NAVY MANPOWER RESOURCES.

...CURRENT IMPORTANT PROGRAMS

INSTRUCTIONAL DESIGN AND EXPERIMENTAL TRAINING  
COMPUTERIZED MANPOWER MANAGEMENT RESEARCH  
COMPUTER BASED TRAINING AND PERFORMANCE EVALUATION  
HUMAN FACTORS IN PERSONNEL AND TRAINING  
PERSONNEL MEASUREMENT, CLASSIFICATION, ASSIGNMENT, AND RETENTION

...FUNCTIONS/EQUIPMENT/CAPABILITIES

IBM 1500 COMPUTER ASSISTED INSTRUCTION SYSTEM  
IBM 1130 DATA PROCESSING COMPUTER SYSTEM WITH REMOTE JOB ENTRY CAPABILITY TO A IBM 360/65 LOCATED AT THE NAVY ELECTRONICS LABORATORY CENTER  
OPTICAL SCANNER  
EXPERIMENTAL TESTING AND TRAINING FACILITIES  
OPTICAL SCANNING CAPABILITY

INSTALLATION NAVAL PERSONNEL RSCH AND DEVELOPMENT LAB, WASH., D. C.

C.O. CAPT A.L. BLANKS TECH. DIR. E.M. RAMRAS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.529	3.074
TOTAL PROCUREMENT	0.194	0.320
TOTAL O+M	0.789	0.353
TOTAL OTHER	0.288	0.528
TOTAL ANNUAL LAB	3.800	4.275
TOTAL INHOUSE	3.800	4.275
TOTAL INHOUSE RDT+E	2.529	3.074
ANNUAL OPERATING COST	0.579	0.654

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	
MILITARY	43	0	43	0
CIVILIAN	230	8	150	80
TOTAL	273	8	193	80

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	22.156	2.703	1.420	26.279	2.652	0.400

...MISSION  
CONDUCT RESEARCH DEVELOPMENT TEST EVALUATION BEHAVIOR AND SOCIAL  
SCIENCES AND RELATED FIELDS DIRECTED TOWARD NEW AND IMPROVED PERSONNEL  
AND MANPOWER SYSTEMS TECHNIQUES AND OPERATIONS

...CURRENT IMPORTANT PROGRAMS  
ENLISTED OCCUPATIONAL DATA BANK  
ENLISTED ELECTRONIC CAREER STRUCTURES  
FACTORS AFFECTING RETENTION OF ENLISTED MEN  
MANPOWER ALLOCATION AND PRODUCTIVITY MODEL  
METHODS FOR SELECTION VIETNAM ADVISORS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
OCCUPATIONAL RESEARCH CAREER STRUCTURES MAN MACHINE SYSTEMS MANPOWER  
REQUIREMENTS ORGANIZATIONAL EFFECTIVENESS RECRUITMENT PROCUREMENT  
MANPOWER PERSONNEL COSTS ATTITUDES MOTIVATION SIMULATION MODELING  
RCA 301 COMPUTER IBM 1050 DATA LINK TERMINAL OPSCAN 100

INSTALLATION NAVAL RESEARCH LABORATORY, WASHINGTON, D.C.

DIR. CAPT EARLE W. SAPP DIR. OF RESEARCH DR. ALAN BERMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	96.161	111.202
TOTAL PROCUREMENT	11.305	10.058
TOTAL O+M	1.607	0.915
TOTAL OTHER	3.218	2.313
TOTAL ANNUAL LAB	112.291	124.488
TOTAL INHOUSE	106.830	123.083
TOTAL INHOUSE RDT+E	90.700	109.797
ANNUAL OPERATING COST	24.007	26.787

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	88	3	11	77
CIVILIAN	3705	376	1456	2249
TOTAL	3793	379	1467	2326

ACRES	SPACE AND PROPERTY OF SQUARE FEET				COST (MILLION \$)	
	SPACE LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
2049	1544.718	182.791	645.856	2373.365	76.107	58.124

...MISSION  
TO CONDUCT SCIENTIFIC RESEARCH AND DEVELOPMENT IN THE PHYSICAL SCIENCES  
AND RELATED FIELDS DIRECTED TOWARD NEW AND IMPROVED MATERIALS,  
EQUIPMENT, TECHNIQUES, AND SYSTEMS FOR THE NAVY

...CURRENT IMPORTANT PROGRAMS  
HIGH ENERGY LASER GENERATION, PROPAGATION, AND DAMAGE PROGRAM  
ANTI-SURFACE-SHIP MISSILE DEFENSE PROGRAM  
HIGH ALTITUDE EXPLOSION REACTION MODELING AND SIMULATION PROGRAM  
ADVANCED ACOUSTIC ANTI-SUBMARINE WARFARE SURVEILLANCE PROGRAM  
SATELLITE SPACE SURVEILLANCE PROGRAMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
PRINCIPAL PHYSICAL SCIENCE RESEARCH LABORATORY OF THE NAVY. MAJOR  
AREAS ARE ELECTRONICS- INCL. RADAR, COMMUNICATIONS, ELECTRONIC WARFARE,  
CHEMISTRY, METALLURGY, OPTICAL, PLASMA, AND NUCLEAR SCIENCES, SPACE  
SCIENCE, TECHNOLOGY, AND SYSTEMS, MATHEMATICS, ACOUSTICS, OCEANOLOGY. AS  
THE CORPORATE LABORATORY OF THE NAVY, NRL IS RESPONSIBLE FOR MAINTAINING  
A PROGRAM ON THE CUTTING EDGE OF RESEARCH FROM WHICH EVOLVES NEW TECH-  
NIQUES AND EQUIPMENT. MAJOR FACILITIES INCLUDE TWO SHIPS FOR ACOUSTIC  
ASW RESEARCH, OCEANOGRAPHY, AND DEEP OCEAN RESEARCH. MAJOR ACOUSTIC  
STANDARD AND CALIBRATION FACILITIES. HIGH LEVEL RADIATION LABORATORY.  
THREE NUCLEAR PARTICLE ACCELERATORS. HIGH ENERGY LASER FACILITY. SPACE  
SIMULATION FACILITIES.

INSTALLATION NAVAL SHIP RESEARCH AND DEVELOPMENT CTR., WASH., D.C.

C.O. CAPT R.W. KING TECH. DIR. DR. A. POWELL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	87.709	93.764
TOTAL PROCUREMENT	2.890	1.751
TOTAL O+M	11.232	11.043
TOTAL OTHER	15.140	19.603
TOTAL ANNUAL LAB	116.971	126.161
TOTAL INHOUSE	78.330	81.551
TOTAL INHOUSE RDT+E	58.181	61.195
ANNUAL OPERATING COST	24.686	27.784

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	177	6	40	137
CIVILIAN	3581	113	1449	2132
TOTAL	3758	119	1489	2269

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
975	559.910	203.006	1779.348	2542.264	79.474	49.842

...MISSION  
TO CONDUCT A PROGRAM OF ANALYSIS, R D T AND E, SYSTEMS INTEGRATION,  
FLEET ENGINEERING SUPPORT IN NAVAL SHIP SYSTEMS, AND TO CONDUCT INVEST-  
IGATIONS INTO RELATED FIELDS OF SCIENCE AND TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS  
TECHNOLOGY OF NAVAL CATAMARANS. ADVANCED SUBMARINES - CONTROL, SILENCING  
PROPULSION, AND STRUCTURES. DEVELOPMENT OF LARGE, HIGH PERFORMANCE  
HYDROFOIL SHIPS. CIRCULATION CONTROL ROTORS FOR HELICOPTERS. SHIPBOARD  
POLLUTION ABATEMENT. DETECTION AND CLASSIFICATION OF UNDERWATER OBJECTS  
INCLUDING BURIED MINES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
PLAN AND CONDUCT R D T AND E AND PROVIDE SUPPORT TO THE OPERATING FORCES  
AND NAVAL AND GOVERNMENT AGENCIES AS ASSIGNED IN THE AREAS OF HYDROME-  
CHANICS, AERODYNAMICS, STRUCTURAL MECHANICS + MATERIAL, APPLIED MATHE-  
MATICS, ACOUSTICS AND VIBRATIONS, SUBSURFACE, SURFACE, AND AIRBORNE MINE  
DEFENSE, ACOUSTIC + TORPEDO COUNTERMEASURES, INSHORE WARFARE, SHIPS AT-  
MOSPHERE CONDITIONING + POLLUTION CONTROL, SHIP ELECTRICAL SYSTEMS, AND  
SHIPBOARD MACHINERY SYSTEMS. FACILITIES INCLUDE BALLAST BLOW TEST  
FACILITY MAIN SEAWATER PIPING SYSTEM FACILITY COMPUTER FACILITIES MAN  
-RATED OCEAN SIMULATION FACILITY HIGH SPEED, DEEP AND SHALLOW WATER,  
MANEUVERING-SEAKEEPING, AND ROTATING ARM TOWING BASINS SUBSONIC, TRAN-  
SONIC, SUPERSONIC, AND HYPERSONIC WIND TUNNELS ACOUSTIC DATA ANALYSIS  
CENTER ANECHOIC FLOW FACILITY AND STRUCTURAL RESEARCH FACILITIES.

INSTALLATION NAVY SPACE SYSTEMS ACTIVITY, LOS ANGELES, CALIF.

C.O. CAPT DOC G. FAULKNER, JR.

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	6.045	5.023
TOTAL PROCUREMENT	1.680	1.300
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.228	0.228
TOTAL ANNUAL LAB	7.953	6.551
TOTAL INHOUSE	0.858	0.979
TOTAL INHOUSE RDT+E	0.630	0.751
ANNUAL OPERATING COST	0.000	32.200

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	28	1	14	14
CIVILIAN	38	1	20	18
TOTAL	66	2	34	32

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	0.000	6.000	0.000	6.000	0.000	0.025

...MISSION

PROVIDE ENGR COMPETENCE + MGMT FOR DEVELOPMENT OF ASSIGNED SPA SYS RESPONSIVE TO REQUIREMENTS OTHER NAVACTS PROVIDE GUIDANCE TO NAVAIRSYSCOMHQ'S ON SCOPE + CONTENT OF ADV STUDY, RESEARCH + EXPLOR PROG PERFORM MGMT + ENGR FUNCTIONS RELATED TO JTSVCSPASYS DEVELOPMENT COORD WITH USAF SAMSO.

...CURRENT IMPORTANT PROGRAMS

PROJECT 749  
PROJECT READOUT  
FLEET SATELLITE COMMUNICATIONS SYSTEM  
SPACE TEST PROGRAM  
SATELLITE APPLICATION FOR SEARCH AND RESCUE

...FUNCTIONS/EQUIPMENT/CAPABILITIES

INITIATE PLAN + EXECUTE SPACE PROJECTS AS ASSIGNED  
PRODUCE TECH COST + EFFECT STUDIES + ASSOC ENGR MGMT + FINAN PLANS  
RESP MISSION AREAS NAVY PARTICIPATES AS MBR JOINT-SVC EFFORT  
COORD ASSOCIATED NAVY SPT EFFORT TO DOD + DOD-NASA SPACE-RELATED PROG  
ACT AS FOCAL POINT FOR NAVY SPACE EXPERIMENTS  
ACT AS SINGLE POINT OF CONTACT WITH USAF SAMSO FOR ALL SPACE MATTERS  
COORD SPT PROVIDED BY OTHER NAVACTS TO AREAS NSSA RESPONSIBLE

INSTALLATION NAVAL SUBMARINE MED. RSCH LAB, NEW LONDON, GROTON, CT  
 C.O. CDR J. BLOOM SCIENTIFIC DIR. DR. C.F. GELL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.160	1.451
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.287	0.362
TOTAL ANNUAL LAB	1.447	1.813
TOTAL INHOUSE	1.447	1.813
TOTAL INHOUSE RDT+E	1.160	1.451
ANNUAL OPERATING COST	0.620	0.685

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	25	8	14		11
CIVILIAN	55	11	38		17
TOTAL	80	19	52		28

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	27.160	10.382	18.279	55.821	0.000	1.250

...MISSION

LONGITUDINAL HEALTH STUDY OF SUB AND DIVING PERS  
 RESEARCH PHYSIO EFFECTS OF EXPOSURE TO INCREASED CO2 AND O2 IN HYPERBARIC ENVIRONMENT

...CURRENT IMPORTANT PROGRAMS

STUDY UNDERWATER ENVIRON ON HEARING IN DIVERS  
 STUDY EFFECTS OF MIXED BREATHING GASES ON SPEECH IN DIVERS  
 STUDY EPIDEMIOLOGIC RELATIONSHIP OF AEROSOLS IN SUBMARINES  
 TEST SUBMARINE ESCAPE SUIT  
 FIELD STUDIES OF UNDERWATER VISION AND COLOR VISION

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DEV SENSORY AIDS FOR UNDERWATER COMMUNICATIONS DEV AND EVAL SUB AND DIVING SAFETY EQUIP LONGRANGE TOX STUDIES IN SUB ENVIRON HYPERBARIC CHAMBER AS CLINICAL TREATMENT DEVICE USE OF VISUAL EVOKED CORTICAL POTENTIALS AS EARLY INDICATORS OF PERFORMANCE DECREMENT WCRK PHYSIOLOGY RELATED TO DIVING AND SUBS BIOCHEM CORRELATES OF COLD EXPCURE STRESS

INSTALLATION NAVY TOXICOLOGY UNIT, NMCC, BETHESDA, MD.

C.O. CAPT J. SIEGEL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.128	0.200
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.037
TOTAL OTHER	0.120	0.181
TOTAL ANNUAL LAB	0.248	0.418
TOTAL INHOUSE	0.248	0.418
TOTAL INHOUSE RDT+E	0.128	0.200
ANNUAL OPERATING COST	0.015	0.015

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	15	0	5	10
CIVILIAN	8	0	3	5
TOTAL	23	0	8	15

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
0	2.260	0.140	1.416	3.816	0.187	0.438

...MISSION

EVAL POTENTIALLY TOXIC MATERIAL AND EQUIP ABOARD SUBS. DEVISE SOLUTIONS TO TOXICOLOGIC PROBLEMS AFLOAT. CONDUCT RDT+E IN OPERATIONAL TOXICOLOGY AND HEALTH ENGINEERING. CONDUCT HI PRESS TOX STUDIES. STUDY SYNERGISM OF PRODUCTS FORMED DURING FIRES ABOARD AIRCRAFT CARRIERS

...CURRENT IMPORTANT PROGRAMS

TOXICITY OF TRACE CONTAMINANTS OF SUBMARINE ENVIRONMENTS. INHALATION TOX AND MODE OF ACTION OF DICHLOROACETYLENE. TOX OF TORPEDO PROPELLANTS AND CHEMILUMINESCENT MATERIALS. TOXICITY AND SYNERGISTIC EFFECTS OF PRODUCTS FORMED DURING AIRCRAFT CARRIER FIRES. ACUTE HYPERBARIC TOX OF TRACE CONTAMINANTS AS CO SO2 HALOGENATED OR AROMATIC HYDROCARBONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

EVAL ACUTE AND CHRONIC TOXICITY OF AIR POLLUTANTS ABOARD SUBS BY EFFECT ON HEMATOLOGIC BIOCHEMICAL ENZYMIC AND PATHOLOGIC PARAMETERS. DEVELOP MODE AND SITE OF ACTION OF TOXIC MATERIALS. DEVELOP HANDLING PROCEDURES FOR TOX MATERIALS INCLUDING ORAL SKIN OCULAR AND INHALATION HAZARDS. RECOMMEND CONFINED SPACE GUIDELINES AND GOOD OPERATING PROCEDURES TO MINIMIZE HEALTH HAZARDS. COMPARE TOX OF AIR POLLUTANTS AT 0 + 500 PSIG FACILITIES + EQUIP CAPABILITY CONSISTS OF 6-2 CU METER AMBIENT EXPOSURE CHAMBERS. GLEACH 30 LITER ACUTE CHAMBERS. 150+ 1000 PSIG CHAMBERS. 7-POINT ON-LINE AUTO CHAMBER SAMPLING SYSTEM. WET CHEM BIOCHEM + HEMATOL LABS. AUTOANALYZER. 7 GAS CHROMATOGRS. IR + UV INSTR. MICROCOULOMETER. ASSOC LAB EQUIP. OVERALL CAPABILITY IN AIR POLLUTION INCLUDING AIR ANALYSES EFFECT ON ANIMALS AND SETTING AIR QUALITY CRITERIA

INSTALLATION NAVAL TRAINING DEVICES CENTER, ORLANDO, FLA.

C.O. CAPT F.H. FEATHERSTON TECH. DIR. DR. H.H. WOLFF

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	13.564	16.763
TOTAL PROCUREMENT	48.143	81.337
TOTAL O+M	9.975	9.835
TOTAL OTHER	0.574	0.601
TOTAL ANNUAL LAB	72.256	108.536
TOTAL INHOUSE	23.898	23.424
TOTAL INHOUSE RDT+E	11.561	11.656
ANNUAL OPERATING COST	5.833	6.267

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	50	1	39	11	
CIVILIAN	1128	10	283	845	
TOTAL	1178	11	322	856	

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
60	93.580	201.356	123.346	418.282	2.850	4.401

...MISSION

IMPROVE THE EFFECTIVENESS OF THE NAVAL TRAINING PROGRAM THROUGH THE CONDUCT OF RESEARCH LEADING TO + THE DEVELOPMENT + PRODUCTION OF TRAINING EQUIPMENT PROVIDE + CONTROL LOGISTIC + MATERIAL SUPPORT OF SUCH EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS

OPTICAL TECHNOLOGIES IN NAVY TRAINING DEVICES  
ELECTRONIC TECHNIQUES FOR NAVY TRAINING DEVICES  
PROJECTED VISUAL SIMULATION OF THE NAVAL OPERATIONAL ENVIRONMENT  
GENERAL SIMULATION MODELING FOR NAVY TRAINING DEVICES  
HUMAN FACTORS IN THE DESIGN AND USE OF NAVAL TRAINING SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

EFFORT IS ALLOCATED TO AREAS OF TRAINING METHODOLOGY AND SIMULATION TECHNOLOGY WHICH SHOW GREATEST PROMISE OF SIGNIFICANT IMPROVEMENT TO TRAINING DEVICE DESIGN. INVESTIGATIONS ARE CONDUCTED BY THE PHYSICAL SCIENCES, ELECTRONICS, VISUAL SIMULATION COMPUTER AND HUMAN FACTORS LABORATORIES. THESE LABORATORIES ADVANCE THE STATE-OF-THE-ART IN TRAINING, METHODOLOGY AND SIMULATION TECHNOLOGY AND MAINTAIN LEADERSHIP IN THE THEORY AND CONCEPT OF SIMULATION FOR TRAINING INVESTIGATE, DISSEMINATE AND EXCHANGE RESEARCH INFORMATION RELATED TO TRAINING DEVICES, SIMULATION TECHNIQUES AND MEANS FOR INTEGRATING MAN AND MACHINE AND COORDINATE FORMULATION OF RESEARCH REQUIREMENTS TO FILL GAPS IN TECHNICAL AND ENGINEERING KNOWLEDGE.

INSTALLATION NAVAL UNDERSEA R+D CENTER, SAN DIEGO, CALIF.

C.O. CAPT C.B. BISHOP TECH. DIR. DR. WM. B. MCLEAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	40.081	43.849
TOTAL PROCUREMENT	17.541	18.499
TOTAL O+M	9.385	7.893
TOTAL OTHER	12.662	5.560
TOTAL ANNUAL LAB	79.669	75.805
TOTAL INHOUSE	53.255	48.995
TOTAL INHOUSE RDT+E	27.311	29.319
ANNUAL OPERATING COST	16.606	18.073

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	304	0	33	271
CIVILIAN	1621	85	652	969
TOTAL	1925	85	685	1240

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
37615	331.944	33.457	666.654	1032.055	36.703	44.540

...MISSION  
TO CONDUCT A PROGRAM OF WARFARE ANALYSIS, RESEARCH, DEVELOPMENT, TEST,  
EVALUATION, SYSTEMS INTEGRATION, AND FLEET ENGINEERING SUPPORT IN UNDER-  
SEA WARFARE AND TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS  
ADVANCED SONAR TECHNIQS DEVEL + FLEET SONAR SYSTEMS IMPROVEMENT  
OCEAN SCIENCES, INCL MARINE BIOSCIENCES, WITH USW APPLICATION  
TORPEDO DEVEL + IN-SERVICE SUPPRT + MODERNIZATION PROGRAM  
DEEP SUBMERGENCE RECOVERY + WORK SYSTEMS DEVEL + TEST  
FLEET SUPPORT INCL ASW ANALYSIS + EFFECTIVENESS EVAL.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
ORIGINATE + DEVELOP NEW CONCEPTS IN UNDERSEA WARFARE + OCEAN TECH-  
NOLOGY. CONDUCT RESEARCH RELATED TO USW PROBLEMS PEC'LIAR TO PACIFIC  
AREAS. DEVELOP INTEGRATED USW SYSTEMS, DEEP OCEAN ENGR EQUIP + TECH-  
NICS, + FACILITATE THEIR PRODUCTION + FLEET USE. ASSESS ASW FORCES,  
PROGRAMS, TACTICS. RDT+E LABS SDIEGO, PASADENA, HAWAII. SEA TEST + ENGR  
RANGES SAN CLEMENTE IS, MORRIS CAM, LBEACH. ACOUSTIC PROPAGATION RANGE  
OFF CAL COAST. CALIBRATION STA, LAKE PEND OREILLE. ARCTIC FIELD STA,  
ALASKA. MARINE BIOSCI FAC, ARCTIC SUBMARINE LAB + POLAR ICE SIMULATOR,  
TRANSDUCER EVAL CTR ANECHOIC ALL FREQUENCIES, ASW COMPUTER SIMULATION  
CTR, RESEARCH SHIPS + CRAFT INCL USNS S.P. LEE T-AG-192, DATA ACQUISITION,  
PLAYBACK+ANAL FAC FOR DEVEL+EVAL OF SIGNAL PROCESSING TECHNIQS,  
RESCUE SYSTEM TEST FAC, VARIABLE ANGLE LAUNCHER, + OTHERS.

INSTALLATION NAVAL UNDERWATER SYSTEMS CENTER, NEWPORT, R.I.

C.O. CAPT ROBERT T. LUNDY TECH. DIR. HAROLD E. NASH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	39.288	55.264
TOTAL PROCUREMENT	36.279	34.378
TOTAL O+M	18.650	20.944
TOTAL OTHER	3.304	13.971
TOTAL ANNUAL LAB	97.521	124.557
TOTAL INHOUSE	59.631	67.517
TOTAL INHOUSE RDT+E	26.372	27.416
ANNUAL OPERATING COST	14.284	17.396

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	109	0	24	85
CIVILIAN	2936	60	1313	1623
TOTAL	3045	60	1337	1708

ACRES	SPACE AND PROPERTY			COST (MILLION \$)	
	SPACE (THOUSANDS LAB ADMIN	OF SQUARE FEET OTHER	TOTAL	REAL PROP	EQUIP
338	480.273 200.987	581.202	1270.462	28.158	19.859

...MISSION

TO PLAN AND CONDUCT PROGRAMS OF WARFARE AND SYSTEMS ANALYSES RESEARCH DEVELOPMENT TEST EVALUATION AND FLEET SUPPORT IN UNDERWATER WARFARE WEAPONS SYSTEMS + COMPONENTS UNDERSEAS SURVEILLANCE SYSTEMS SUBMARINE COMMUNICATIONS SYSTEMS NAVIGATION + RELATED SCIENCE + TECHNOLOGY

...CURRENT IMPORTANT PROGRAMS

ACOUSTIC-ENVIRONMENTAL MEASUREMENTS AT SEA  
ELECTROMAGNETIC ENVIRONMENTAL MEASUREMENTS AT SEA  
INDEPENDENT RESEARCH AND EXPLORATORY DEVELOPMENT ON WEAPONS SYSTEMS  
OCEANOGRAPHIC INVESTIGATIONS RELATED TO WEAPON PERFORMANCE  
CONDUCT OF UNDER-THE-ICE EXPERIMENTAL INVESTIGATIONS AND PROGRAMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN AND CONDUCT PROGRAMS CONCERNED WITH APPLIED RDT+E OF SUBMARINE AND SURFACE SHIP SONARS UNDERWATER COMMUNICATION AND NAVIGATION SYSTEMS TACTICAL DISPLAYS FIRE CONTROL UNDERWATER WEAPONS AND LAUNCHERS. CONDUCT R+D IN UNDERWATER TARGET SYSTEMS RANGE TECHNOLOGY ACOUSTIC PROPAGATION AND RELATED ENVIRONMENTAL STUDIES. PROVIDE SHIP ACQUISITION TECHNICAL SUPPORT FOR UNDERWATER SYSTEMS ASW SUPPORT AND FLEET READINESS SUPPORT FOR ALL UNDERWATER WEAPONS SYSTEMS. MAJOR UNIQUE EQUIPMENTS + FACILITIES INCLUDE BERMUDA RESEARCH FACILITY/ASW WEAPON FIRE CONTROL R+D FACILITY/ SHALLOW AND DEEP WATER TORPEDO TEST RANGES/ASW LAUNCHING DEVICE R+D FACILITY/ACOUSTIC MEASUREMENT + TRANSDUCER RESEARCH AND EVALUATION FACILITY/ANALYSIS AND COMPUTER LABS TO EVALUATE EXISTING AND PROPOSED WEAPONS SYSTEMS AND TO CONDUCT DATA REDUCTION AND ANALYSIS.

INSTALLATION NAVAL UNIT, FORT DETRICK, FREDERICK, MD.

C.O. CAPT G.W. WERNER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.036	0.045
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.125	0.143
TOTAL ANNUAL LAB	0.161	0.188
TOTAL INHOUSE	0.161	0.188
TOTAL INHOUSE RDT+E	0.036	0.045
ANNUAL OPERATING COST	0.014	0.019

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	13	1	4	9
CIVILIAN	1	0	0	1
TOTAL	14	1	4	10

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	0.000	2.025	0.081	2.106	0.000	0.008

...MISSION

PROMOTE MODERN MED SCIENTIFIC RESEARCH JOINTLY WITH DEPT OF THE ARMY AND EVALUATE IMPROVE AND DEV BIOLOGIC DECONTAMINATION METHODS OF GAS DISSEMINATORS

...CURRENT IMPORTANT PROGRAMS

DEVELOPMENT OF NEW EXPERIMENTAL VACCINES  
ENVIRONMENTAL PREVENTION AND CONTROL OF AIRBORNE DISEASES  
CLEANSING OF HOSP EQUIP AND SPACES WITH GASEOUS DISINFECTANTS  
BIOLOGICAL DECONTAMINATION PROCEDURES FOR SHORE AND AFLOAT USE  
BIODECONTAMINATION OF DEEP SUBMERGENCE VEHICLES HABITATS AND EQUIP

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DEVELOP MATERIALS AND METHODS COMPATIBLE WITH NAVY REQUIREMENTS FOR THE PREVENTION AND CONTROL OF DISEASES OF NATURAL AND UNNATURAL ORIGIN  
MAJOR LAB EQUIP AND FACILITIES FOR SAFE HANDLING OF PATHOGENIC MICROORGANISMS MADE AVAILABLE BY ARMY DISSEMINATORS WITH ANCILLARY EQUIP FOR STERILIZATION OF LABS HOSPITALS SUBMARINES AND DEE SEA SUBMERGENCE VEHICLES HABITATS AND EQUIP CAPABILITY IN BIOLOGICAL DECONTAMINATION VIRAL AND BACTERIAL SEROLOGY VIRAL AND TISSUE CULTURE AND AEROBIOLOGY

INSTALLATION NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.

C.O. RADM W.J. MORAN TECH. DIR. H.G. WILSON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	83.405	85.000
TOTAL PROCUREMENT	32.846	43.500
TOTAL O+M	3.110	4.000
TOTAL OTHER	32.153	30.300
TOTAL ANNUAL LAB	151.514	162.800
TOTAL INHOUSE	91.556	97.263
TOTAL INHOUSE RDT+E	52.246	53.473
ANNUAL OPERATING COST	42.521	42.900

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	729	0	53	676	
CIVILIAN	4308	109	1358	2950	
TOTAL	5037	109	1411	3626	

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1092920	1310.547	169.566	5095.208	6575.321	227.607	82.899

...MISSION  
TO CONDUCT A PROGRAM OF WARFARE ANALYSIS, RESEARCH, DEVELOPMENT, TEST, EVALUATION, SYSTEMS INTEGRATION, AND FLEET ENGINEERING SUPPORT IN NAVAL WEAPONS SYSTEMS PRINCIPALLY FOR AIR WARFARE AND TO CONDUCT INVESTIGATIONS INTO RELATED FIELDS OF SCIENCE AND TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS  
AGILE--ADVANCED AIR-TO-AIR MISSILE SYSTEM.  
BULLDOG--CLOSE AIR SUPPORT WEAPON SYSTEM.  
FUEL AIR EXPLOSIVE WEAPON SYSTEM.  
HARPOON--AIR AND SURFACE LAUNCHED SHIP ATTACK SYSTEM.  
NIGHT ATTACK--FLIR, APC, INDAM--ADVANCED AIR-TO-SURFACE WEAPON SYSTEM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
FUNCTIONS INCLUDE DEVELOPMENT OF AIR LAUNCHED WEAPONS AND ASSOCIATED AVIONICS, TACTICAL MISSILES FOR AIR LAUNCH, POINT DEFENSE, AND ANTI-SHIP OPERATIONS, AND SUBSYSTEM DEVELOPMENT FOR THESE SYSTEMS, INCLUDING PROPULSION, GUIDANCE AND CONTROL, WARHEADS, FUZES, AND LAUNCHERS OPERATIONS ANALYSIS AND SIMULATION, AND BASIC AND APPLIED RESEARCH IN RELEVANT FIELDS.  
FACILITIES INCLUDE MICHELSON LAB, WARHEAD RESEARCH LAB, GROUND AND AIRCRAFT RANGES, SUPERSONIC TEST TRACKS, SOLID STATE DEVICES LAB, FUZE MODEL RANGE, ATMOSPHERIC APPLICATIONS LAB, AIRCRAFT SURVIVABILITY RANGE, PROPULSION RESEARCH LAB, STRIKE WARFARE SIMULATION LAB, MICROELECTRONICS FACILITY, MICROWAVE ANECHOIC FACILITIES, DIGITAL AND ANALOG COMPUTER FACILITIES, ECHO RANGE, TECHNICAL LIBRARY + MACH SHOPS.

INSTALLATION NAVAL WEAPONS EVALUATION FACILITY, ALBUQUERQUE, N.MEX

C.O. CAPT W.W. STRONG TECH. DIR. F.X. BUSHNER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	1.338	1.050
TOTAL PROCUREMENT	0.230	0.598
TOTAL O+M	0.875	0.959
TOTAL OTHER	2.100	2.213
TOTAL ANNUAL LAB	4.543	4.820
TOTAL INHOUSE	4.526	4.720
TOTAL INHOUSE RDT+E	1.321	0.950
ANNUAL OPERATING COST	0.375	0.445

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	210	0	68	142	
CIVILIAN	90	1	51	39	
TOTAL	300	1	119	181	

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
4	LAB 17.942	ADMIN 17.942	OTHER 91.118	127.002	6.000	0.409

...MISSION

PLAN-COORDINATE NAVY NUCLEAR SAFETY PROGRAM TO ENHANCE FLEET SAFETY  
CONDUCT NUCLEAR SYSTEMS SAFETY STUDIES-REVIEWS ON US AND FOREIGN SYSTEMS  
PUBLISH NEW-REVISED NUC NONNUC CHECKLISTS VERIFY ASSOCIATED LOADING AND  
DETERMINE MILITARY CHARACTERISTICS AND STOCKPILE ENVIRONMENT FOR NEW

...CURRENT IMPORTANT PROGRAMS

COORDINATED NAVY NUCLEAR SAFETY PROGRAM AND DISSEMINATED SAFETY INFO  
COMPLETED VARIOUS SHIP AMPH SUB AIRCRAFT NUCLEAR SYSTEMS SAFETY STUDIES  
PROVIDED NUCLEAR WEAPONS ACCEPTANCE VULNERABILITY EMERG DESTRUCT DATA  
PUBLISHED NUC NONNUC WEAPONS-AC CHECKLISTS VERIFIED LOADING MANUALS  
COMPLETED ATE NUCLEAR WEAPONS TRIALS FOR BOARD OF INSPECTION AND SURVEY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

WPNS SUPPORT BOARD INSP AND SURVEY NUC WPN TRIALS AND SHIP ACCEPTANCE  
PROVIDE DESIGN CRITERIA MILITARY CHARACTERISTICS STOCKPILE-TO-TARGET  
DATA FOR CNO SPECIFIC OPERATIONAL REQUIREMENTS ON NEW NUC SYSTEMS PLAN  
IMPROVED METHODS ASSURING EFFECTIVE NAVY NUCLEAR SAFETY PROGRAM PLAN  
CONDUCT SAFETY STUDIES-REVIEWS ON NAVY SYSTEMS SUPPORT BOARD OF INSPECT  
ION AND SURVEY CONDUCT VULNERABILITY ANALYSIS OF NAVY A/C TO NUC EFFECTS  
AND DEVELOP NEW METHODS FOR EMERG DEST OF WPNS ADVANCE STATE-OF-ART IN  
NUC NONNUC CHECKLISTS DEVELOPMENT MANUAL VERIFICATION RELIABILITY CARDS  
PERFORM TESTS EVALUATIONS AND PROVIDE TECH SUPP FOR NUC-NONNUC WPN SYST  
EMS ASSIST CNO IN NUC SAFETY AND PREVENTION OF ACCIDENTS-INCIDENTS PLAN-  
CONDUCT NUC SYSTEMS SAFETY STUDIES-REVIEWS PLAN-COORDINATE NAVY NUC SAF  
ETY PROGRAM CONDUCT NUC SYSTEMS TRIALS FOR BOARD INSPECTION AND SURVEY

INSTALLATION NAVAL WEAPONS LABORATORY, DAHLGREN, VA.

C.O. CAPT STEVEN N. ANASTASION TECH. DIR. BERNARD SMITH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	28.263	37.901
TOTAL PROCUREMENT	22.321	12.695
TOTAL O+M	7.876	8.546
TOTAL OTHER	12.828	17.165
TOTAL ANNUAL LAB	71.288	76.307
TOTAL INHOUSE	54.582	59.390
TOTAL INHOUSE RDT+E	22.933	32.501
ANNUAL OPERATING COST	9.557	11.005

PERSONNEL	PERSONNEL DATA (END OF FY 1971)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF		
MILITARY	100	1	25	75	
CIVILIAN	2703	60	958	1745	
TOTAL	2803	61	983	1820	

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
4490	541.641	76.842	933.132	1551.615	64.979	30.977

...MISSION

CONDUCTS A PROGRAM OF WARFARE ANALYSIS, RDT+E, SYSTEMS INTEGRATION, AND FLEET ENGINEERING SUPPORT IN NAVAL WEAPONS SYSTEMS, PRINCIPALLY FOR SURFACE WARFARE, AND CONDUCTS SUPPORTING PROGRAMS IN OTHER WARFARE AND FIELDS OF TECHNOLOGY

...CURRENT IMPORTANT PROGRAMS

LONG RANGE GUN SYSTEM AND GUIDED AMMUNITION PROGRAMS  
NAVAL TACTICAL RECONNAISSANCE AND SURVEILLANCE PROGRAMS  
GUIDANCE DATA FOR POLARIS/POSEIDON/ULMS/FBM SYSTEMS PROGRAMS  
NAVY AND MARINE CORPS FIRE SUPPORT STUDIES  
DIGITAL FIRE CONTROL SOFTWARE/HARDWARE PROGRAMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

LAB CAPABILITIES SUPPORT WORK IN TACTICAL, STRATEGIC, AMPHIBIOUS AND MINE WARFARE ANALYSIS SYSTEMS EFFECTIVENESS STUDIES SATELLITE GEODESY DIGITAL FIRE CONTROL SYSTEMS RDT+E IN WARFARE + SURFACE LAUNCHED WEAPON ELECTROMAGNETIC WARFARE GEO, INTERIOR, EXTERIOR + TERMINAL BALLISTICS WEAPONS SAFETY WARHEAD + AMMO R+D GUIDANCE + WEAPONS CONTROL PRODUCT ENGR MODEL FABRICATION ELECTRONIC AND APPLIED PHYSICS FACILITIES INCLUDE PHYSICAL METALLURGICAL, EXPLOSIVES EXPERIMENTAL, CHEM, WEP SAFETY RES, PHOTO, ELECTROMAGNETICALLY SHIELDED, AIRBORNE, BIO DETECT LABS COMPLETE COMPUTATION AND ANALYSIS CENTER WARHEAD RDT+E, EXPLOSIVES, ENVIRONMENTAL, TARGET SIMULATION, TEST+MISSILE LAUNCH RANGE, STATIC TEST, GUNNERY + MISSILE FIRE RANGES, CONICAL SHOCK TUBE, ORDNANCE RADIOGRAPHIC, AND EXPERIMENTAL MACHINE SHOP FACILITIES.

INSTALLATION AEROPROPULSION LAB., WPAFB, OHIO

C.O. COL T.P. MOTT-SMITH DEPUTY DIR. M.P. DUNNAM

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	52.638	50.805
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	52.638	50.805
TOTAL INHOUSE	4.393	4.899
TOTAL INHOUSE RDT+E	4.393	4.899
ANNUAL OPERATING COST	0.624	0.632

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	58	3	51	7
CIVILIAN	331	5	168	163
TOTAL	389	8	219	170

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
40	309.500	66.500	274.775	650.775	12.894	16.713

...MISSION

PLAN, FORMULATE AND EXECUTE EXPLORATORY AND ADVANCED DEVELOPMENT PROGRAMS IN AIR-BREATHING AND ELECTRIC PROPULSION, FLIGHT POWER AND AIRCRAFT FUELS, LUBRICANTS AND FIRE PROTECTION. ENSURE THE RAPID APPLICATION OF RESEARCH AND TECHNOLOGY TO ADVANCED AEROSPACE SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

HIGH TEMPERATURE TURBINE, WITH VARIABLE GEOMETRY AND HIGH STAGE LOADING COMPONENT DEVELOPMENT FOR HIGH PERFORMANCE AND LOW COST TURBINE ENGINES  
FOUR MEGAWATT AUXILIARY POWER UNIT AND SUPERCONDUCTING GENERATOR  
SOLAR COLLECTOR THERMAL POWER SYSTEM FOR SURVEILLANCE SATELLITES  
IMPROVED FIRE EXTINGUISHMENT AND DISPENSERS FOR HABITABLE COMPARTMENTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TURBOSHAFT ENGINE ALT CELL-FUEL CONTROL SYNTHESIS-CENTRAL DATA SYSTEM,  
ENERGY CONVERSION/TRANSFER FAC-PROGRAMMABLE BATTERY TEST RACKS, LUBRICANT  
RESEARCH FAC-GEAR RIGS-BEARING RIG-SEAL TEST RIGS, FUEL RESEARCH LAB-  
CORROSION TEST-AGING CHAMBERS-FUEL CHAMBER, ROTOR TEST FAC-UP TO 4000 HP  
-95 FT MAX DIA UP TO 50000 LB THRUST, TURBINE ENGINE TEST STANDS-10 SEA  
LEVEL STANDS TO 50000 LB THRUST, 2 TURBINE ENGINE ALTITUDE CELLS TO 3000  
LB THRUST-50000 FT-MACH 1.5, PROPELLER WHIRL RIGS-4 RIGS TO 30000 HP,  
GYROSCOPIC TEST CHAMBER, SPACE POWER VACUUM AND LIQUID METAL LOOP FAC  
27 FT DIA BY 37 FT HIGH, HEAT TRANSFER RESEARCH FAC-HYDROGEN COOLED  
TURBINE ENGINE BLADES, ELECTRO AERODYNAMIC LASER FAC-VARIABLE POWER SUP-  
PLY TO 300 KW AT 100-600 VDC, AIRCRAFT SOLID STATE ELECTRICAL POWER FAC-  
THREE 350 HP DRIVE STANDS-2 A7 AIRCRAFT ELECTRICAL SIMULATORS

INSTALLATION AEROSPACE MEDICAL LAB. (CLINICAL), LACKLAND AFB, TEX

C.O. COL P.W. MYERS DIR. COL J.J. MC PAUL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.130	0.000
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.262	0.000
TOTAL ANNUAL LAB	0.392	0.000
TOTAL INHOUSE	0.392	0.000
TOTAL INHOUSE RDT+E	0.130	0.000
ANNUAL OPERATING COST	0.045	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	28	2	8	20
CIVILIAN	2	0	0	2
TOTAL	30	2	8	22

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1	7.587	1.467	2.200	11.254	0.140	0.849

...MISSION  
PROVIDES THE USAF MEDICAL CORPS RESEARCH CAPABILITY IN CLINICAL MEDICINE  
IMPROVE DIAGNOSTIC METHODS TO SOLVE MEDICAL PROBLEMS UNIQUE TO THE USAF.  
THE AEROSPACE MEDICAL LAB (CLINICAL) WILL CEASE TO FUNCTION AS AN RDT E  
FACILITY ON 30 JUNE 1972.

...CURRENT IMPORTANT PROGRAMS  
DEVELOP TECHNIQUES TO ENHANCE SURVIVAL OF ORGAN HOMOTRANSPLANTS.  
STUDY GLOMULAR ANTIBODIES IN ACUTE AND CHRONIC GLOMERULONEPHRITIS.  
EVALUATE NEW CANCER CHEMOTHERAPY AND DRUGS USED IN NEW COMBINATIONS.  
INVESTIGATE ALDOSTERONE/ANGIOTENSIN IN UNILATERAL RENAL HYPERTENSION.  
EVALUATE REHABILITATION CAPABILITIES FOLLOWING MYOCARDIAL INFARCTION.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
PROVIDE USAF MEDICAL CORPS WITH RESEARCH FACILITIES TO CONDUCT MEDICAL,  
SURGICAL AND DENTAL RESEARCH. MAINTAIN AN OPERATING SUITE WITH VETERINARY  
SUPPORT. SPECIALTY LABORATORIES IN IMMUNOLOGY, HEMATOLOGY, INFECTIOUS  
DISEASE, EXERCISE PHYSIOLOGY, ENDOCRINOLOGY AND BIOCHEMISTRY, HAVE CAPA-  
BILITY TO PERFORM SOPHISTICATED ASSAYS OF TRACE HUMAN HORMONES, INSULIN,  
GROWTH HORMONE, ANGIOTENSIN, ALDOSTERONE, ETC., SERUM COMPLEMENT, VIT B12  
FOLIC ACID AND LEUKOCYTE HISTOCOMPATIBILITY. TOTAL CAPABILITY TO STUDY  
EXERCISE PHYSIOLOGY, SERUM ENZYMES, CONDITIONING AND REHABILITATION,  
MAINTAIN FACILITIES, INSTRUMENTATION AND MONITORING EQUIPMENT TO PURSUE  
RESEARCH STUDIES AND DEVELOP TECHNIQUES IN CONSONANCE WITH THE HIGHEST  
STANDARDS OF MEDICAL CARE AND CLINICAL INVESTIGATION, INCLUDING ATOMIC  
ABSORBER, LIQUID SCINTILLATION COUNTER, ULTRACENTRIFUGATION AND RECORDERS.

INSTALLATION 6570 AEROSPACE MEDICAL RES. LAB., WPAFB, OHIO

C.O. COL C.L. HOLT TECH. DIR. DR. F.W. BERNER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	10.935	11.017
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.479	1.681
TOTAL ANNUAL LAB	12.414	12.698
TOTAL INHOUSE	6.173	6.643
TOTAL INHOUSE RDT+E	4.694	4.962
ANNUAL OPERATING COST	0.858	0.875

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PRCF
MILITARY	133	23	71	62
CIVILIAN	169	28	59	70
TOTAL	302	51	170	132

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
30	211.900	10.000	15.200	237.100	11.570	15.484

...MISSION

CONDUCT R+D TO DEFINE MANS PERFORMANCE, PHYSIOLOGICAL TOLERANCE, PERSONAL PROT. NEEDS, AND DEVELOP PROTECTIVE TECHNIQUES AND EQUIP. TO SUSTAIN AND ENHANCE HIS PERF. IN AF OPERATIONAL ENVIRONMENTS. TO EST. DESIGN CRITERIA AND PROVIDE SUPPORT TO SYSTEM DEVELOPMENT IN ABOVE AREAS.

...CURRENT IMPORTANT PROGRAMS

DEFINE TOXIC HAZARDS-ENVIR. POLLUTION EFF. OF MISSILE OPS.-PROPELLANT TEST DEVELOP A HUMAN PERFORMANCE METHOD TO COUNTER OPTICALLY AIMED WEAPONS. INV. HELMET MOUNTED SIGHT SYS-FOR FLT. CONTROL AND WEAPON DELIVERY APPLNS. INV. HIGH G PILOT SEAT, CONTROLS + DISPLAYS DESIGN FOR CPS. ABOVE 8 G, S. DETERMINE MANS EXP. LIMITS, CAPABILITY, PROT. REQ. DURING ESCAPE FROM ADV. A/C

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOR FUNCTIONS-1. IDENTIFY, QUANTITATE AND DETERMINE TOXIC HAZARDS AND ENVIRONMENTAL POLLUTION EFFECTS CREATED BY AF OPS. 2. PROVIDE NEW CONCEPTS, DESIGN CRITERIA FOR PERSONAL PROT. EQUIP.-PRESSURE SUITS, G-SUITS, LIFE SUPPORT, RESTRAINT SYSTEMS, HELMETS. 3. PROVIDE HUMAN ENGINEERING DATA, PRINCIPLES AND TECHNIQUES APPLICABLE TO DESIGN, TEST, OPN, MAINTENANCE OF AF SYSTEMS AND EQUIP. 4. STUDY EFFECTS, DEFINE MANS TOLERANCE AND PERF. DURING BIODYNAMIC AND COMBINED STRESS OF AF OPERATIONS. MAJOR EQUIP. FACILITIES-HUMAN ENGINEERING RESEARCH LAB, TOXIC HAZARDS RESEARCH LAB, RESEARCH ANIMAL FACILITY, BIODYNAMIC-NOISE, VIBRATION, IMPACT, ACCELERATION AND COMBINED STRESS LAB. MAN RATED ALTITUDE AND ENVIRONMENT CHAMBER SIMULATION FACILITIES.

INSTALLATION AEROSPACE RESEARCH LABORATORIES, WPAFB, OHIO  
 C.O. COL WARREN J. HARE CHIEF SCIENTIST DR. HANS J.P. VCN OHAIN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	12.581	12.615
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.010	1.000
TOTAL ANNUAL LAB	13.591	13.615
TOTAL INHOUSE	9.015	8.937
TOTAL INHOUSE RDT+E	8.005	7.937
ANNUAL OPERATING COST	1.598	1.761

PERSONNEL	PERSONNEL DATA (E.O. OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	79	12	55	24
CIVILIAN	227	58	117	110
TOTAL	306	70	172	134

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
50	134.207	28.512	34.719	197.438	10.543	11.861

...MISSION  
 PLANS AND EXECUTES USAF RESEARCH PROGRAMS IN THE PHYSICAL AND ENGINEER SCIENCES. PROVIDES TECHNICAL OR MANAGEMENT ASSIST IN SUPPORT OF STUDIES, ANALYSES, RESCH AND DEVELOPMENT PLANNING ACTIVITIES, ACQUISITION, TEST, EVALUATION, OPERATION OF AEROSPACE SYSTEMS AND EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS  
 INVESTIGATION OF FLUID DYNAMIC ENERGY AND MOMENTUM EXCHANGE PROCESSES. STUDY OF PROCESSES AT SOLID-GAS AND SOLID-SOLID INTERFACES. STUDY OF INFRARED TRANSMISS AND CONVERSION PROCESSES IN II-VI MATERIALS. FUNDAMENT. RESCH ON NON-EQUILIBRIUM IONIZAT AND EXCITAT PROC IN PLASMAS. STUDY OF THERMOMECH PROCESS ON STRUCY AND PROPERTIES OF SELECTED ALLOYS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 ARL CONDUCTS AND SPONSORS FUNDAMENTAL RESCH INO STRUCTURE AND PROPERTIES OF SOLIDS, CHEMICAL PROPERTIES AND PROCESSES, THERMOMECHANICS, HIGH VELOCITY FLUID MECHANICS, AEROSPACE SIMULATION TECHNIQUES, APPLIED MATH, PLASMA DYNAMICS, GENERAL AND ATOMIC PHYSICS, ENERGY CONVERSION, AND SOLID STATE PHYSICS. SUPPORT FACILITIES INCL GLASS SHOP, MACHINE SHOP AND 15000 VOL. TECHNICAL LIBRARY. EXPERIMENTAL FACILITIES INCL. A HIGH REYNOLDS NUMBER SUPERSONIC TUNNEL, 4 HYPERSONIC WIND TUNNELS, AND A SUPERSONIC COMBUSTION FACILITY, THREE VAN DE GRAAFF ACCELERATORS INCL 8 MEV TANDEM ACCELERATOR, A 1000 ATM. ARC PLASMA FACILITY, A TANDEM ION-MOLECULE MASS SPECTROMETER AND CAPABILITY FOR GROWTH OF THIN PLATELET TYPE II-VI CRYSTALS OF A VERY HIGH DEGREE OF PURITY AND SURFACE PERFECTION.

INSTALLATION ARMAMENT DEVELOP. + TEST CENTER, ELGIN AFB, FLA.

C.O. MAJ GEN J.C. MAXWELL CHIEF SCIENTIST T.H. DALEHITE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	105.651	108.740
TOTAL PROCUREMENT	177.200	233.400
TOTAL O+M	2.319	2.349
TOTAL OTHER	44.508	48.002
TOTAL ANNUAL LAB	329.678	392.491
TOTAL INHOUSE	99.590	106.632
TOTAL INHOUSE RDT+E	52.763	56.281
ANNUAL OPERATING COST	20.000	20.000

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	4965	15	429	4536
CIVILIAN	2998	21	610	2388
TOTAL	7963	36	1039	6924

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
464741	682.324	846.537	6942.749	8471.610	199.803	248.455

...MISSION

EXPL ADV ENGR DEV AND TEST EVAL INITIAL ACQUISITION OF NONNUCLEAR MUNS CONDUCTS TESTS + EVALUATIONS IN FOLLOWING AREAS EMW AFWET COM/CONTROL INTRUSION/INTERDICTION, ELECTRO/OPTICAL, CLIMATIC SIMULATION, VERTICAL PROBES. PERFORMS COMBAT TECH APPL. SUPPORTS TESTS OF OTHER AGENCIES.

...CURRENT IMPORTANT PROGRAMS

DEFENSE SUPPRESSION  
IMPROVED AIRCRAFT GUN SYSTEMS  
GUIDED BOMB KITS PAVEWAY  
MODULAR WEAPONS SERIES  
CLOSE AIR SUPPORT WEAPON SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

A CAPABILITY OF SCIENTIFIC/ENGINEERING PERSONNEL AND LABORATORIES FOR EXPL ADV + ENGR DEV IN THE AREA OF NONNUCLEAR MUNITIONS. ARMAMENT SYS TEST ENVIRONMENT COVERING 728 SQ MI WITH LARGE ADJACENT WATER AREA. HAS 28 TEST AREAS WITH INSTRUMENTED FACILITIES INCLUDING PRECISION TRACKING RADARS AND PHOTO-OPTICS. IS USED FOR MUNITIONS TESTS AND ELECTROMAGNETIC TEST ENVIRONMENT. IS AN INSTRUMENTED COMPLEX OF THREAT SYSTEMS FOR EVALUATION OF EMW DEVICES AND TECHNIQUES. WEAPONS EFFECTIVENESS AND SYS TEST ENVIRONMENT PROVIDES A REALISTIC ENVIRONMENT FOR TESTING A WPNS SYS AGAINST AN ACTIVE DEFENSE SYSTEM. A CLIMATIC LAB CAPABLE OF TESTING COMPLETE WPNS SYSTEMS. A PROBE LAUNCH FACILITY FOR LAUNCHING SCIENTIFIC PROBES. A COMPUTER SCIENCES LAB. A PHYSICAL SCIENCES LAB. A PHOTO LAB. AN INSTRUMENTATION/DESIGN/FAB FACILITY.

INSTALLATION ARNOLD ENGINEERING DEVELOPMENT CENTER, TENN.

C.O. COL WARD E. PROTSMAN CHIEF SCIENTIST DONALD R. EASTMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	51.437	55.063
TOTAL PROCUREMENT	0.000	2.157
TOTAL O+M	0.000	1.817
TOTAL OTHER	4.774	5.178
TOTAL ANNUAL LAB	56.211	64.215
TOTAL INHOUSE	1.311	10.285
TOTAL INHOUSE RDT+E	0.000	8.873
ANNUAL OPERATING COST	3.550	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	103	3	67	36
CIVILIAN	140	3	47	93
TOTAL	243	6	114	129

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
40117	1138.678	201.411	525.148	1865.237	355.856	56.219

...MISSION

PRIMARY MISSION IS TO SUPPORT THE TIMELY ACQUISITION OF QUALITATIVE SUPERIOR AEROSPACE SYSTEMS BY CONDUCTING RESEARCH AND DEVELOPMENT TESTS IN GROUND ENVIRONMENTAL TEST FACILITIES WHICH SIMULATE THE NECESSARY FLIGHT CONDITIONS.

...CURRENT IMPORTANT PROGRAMS

WIND TUNNEL TESTS OF F+15 ACFT CONFIG AND PH2 ENGINE TEST CONTINUE. BEGAN B+1 ACFT CONFIG WIND TUNNEL TESTS AND PREP FOR ENGINE TEST. MINUTE III ROCKET MTR DEVEL, QUAL AND AGING AND SURVEIL TESTS CONTINUE. A+X ACFT CONFIG WIND TUNNEL TESTS BEGAN, STORES SEPARATION TST CONTINUE. OTHER HIGH PRIORITY TEST INCL VIKING, SPACE SHUTTLE, SAFEGUARD.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

AEDC IS COMPRISED OF ABOUT 32 MAJOR TEST UNITS HAVING A CAPITAL VALUE OF MORE THAN 400 MILLION. INCLUDED ARE 15 WIND TUNNELS WITH TEST SECTION SIZES TO 16 FT SQ AND SPEEDS RANGING FROM SUBSONIC TO MACH NO 22, SIX TURBINE ENGINE TEST CELLS WHICH CAN PROVIDE TRUE SIMULATION TO ABOVE MACH 3, FOUR ROCKET ALTITUDE TEST CELLS, THE LARGEST RATED AT ONE+HALF MILLION LBS THRUST, THREE HYPERBALLISTIC RANGES, AND FOUR SPACE SIMULATION CHAMBERS, THE LARGEST BEING 42 FT DIAM BY 82 FT HIGH. THESE TEST FACILITIES HAVE SUPPORTED THE DEVELOPMENT AND QUALIFICATION OF EVERY MAJOR AERONAUTICAL, MISSILE AND SPACE SYSTEMS INITIATED SINCE 1954. THROUGH ADEQUATE PLANNING OF AN ENVIRONMENTAL TEST PROGRAM IN THESE FACILITIES, DEVELOPMENT PROGRAM MANAGERS CAN HELP TO ASSURE THAT SYSTEM DESIGN DEFICIENCIES ARE FOUND EARLY, PREVENTING COST AND SCHED OVERRUNS.

INSTALLATION AVIONICS LAB., WPAFB, OHIO

C.O. COL M. MICHAEL BONNER CHIEF SCIENTIST DR. BERNARD H. LIST

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	90.818	99.720
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.336	1.200
TOTAL ANNUAL LAB	92.154	100.920
TOTAL INHOUSE	9.835	16.158
TOTAL INHOUSE RDT+E	8.499	14.958
ANNUAL OPERATING COST	3.332	5.864

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	91	7	90	1
CIVILIAN	504	11	291	213
TOTAL	595	18	381	214

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
265	224.287	5.304	271.253	500.844	20.872	34.478

...MISSION

PLAN, FORMULATE AND EXECUTE EXPLOR AND ADV DEV PGMS IN TECHNOLOGY GROUPS RELATED TO PENETRATION, INFORMATION GATHERING, TARGET DESTRUCTION, AVIONIC SYSTEMS AND TECHNOLOGY INCLUDING ELECTROOPTICAL, MICROWAVE RADAR TECHS ELECTRONIC DEVICES INTEGRATED CIRCUITS AEROSPACEBORNE SENSORS.

...CURRENT IMPORTANT PROGRAMS

EXPLOIT TECHNIQUES FOR TGT DETECTION, TGT DESIGNATION WEAPON DELIVERY PENETRATION AIDS OPTICAL COUNTERMEASURES FOR MANNED AIRCRAFT AIR-BY-AIR NON-COOPERATIVE IFF ALL WEATHER DIGITAL PROCESSING WEAPON DELIVERY RADAR FORWARD LOOKING INFRARED EQUIPMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCTS IN-HOUSE R & D TO MAINTAIN A HIGH DEGREE OF TECHNICAL COMPETENCE. ACTS AS AFSC FOCAL POINT FOR INFO IN ASSIGNED TECHNICAL AREAS. EXECUTES ASSIGNED PROJECTS FOR AND WORKS CLOSELY WITH ARMY, NAVY, NASA, ARPA, OTHER GOVT AGENCIES. SUPPORTS AFSC PROGRAMS AND INSURES THE RAPID APPLICATION OF RESEARCH TECHNOLOGY TO ADVANCED SYSTEMS. PROVIDES TECHNICAL SUPPORT TO CURRENT FUTURE SYSTEMS PROGRAMS OPERATIONAL SUPPORT PROJECTS IN AREAS OF ASSIGNED MISSION. PERFORM CONCEPTUAL PLANNING, ANALYSIS STUDIES. MAJOR FAC/ EQUIP ARE-ELECTROOPTICAL SURVEILLANCE FAC WITH 48 IN APERTURE-DYNAMIC ANALYZER FOR ADVANCED RECON SYSTEMS-CELESTIAL GUIDANCE RESEARCH LAB WITH A 12 IN CASSEGRAIN TELESCOPE UNDER A 16 FT DIA OBSERVATORY DOME-LASER RESEARCH FAC-SOLID STATE INTEGRATED CIRCUITS LAB-ELECTROMAGNETIC TECHS COUNTERMEASURES LAB INCL ECM OCM SIMULATION FAC.

INSTALLATION CAMBRIDGE RESEARCH LABS., L.G. HANSCOM FLD., MASS.

C.O. COL WILLIAM K. MORAN, JR. CHIEF SCIENTIST DR. JOHN HOWARD

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDY+E	56.292	55.926
TOTAL PROCUREMENT	0.806	0.865
TOTAL O+M	0.021	0.021
TOTAL OTHER	2.759	3.246
TOTAL ANNUAL LAB	59.878	60.058
TOTAL INHOUSE	33.818	35.318
TOTAL INHOUSE RDT+E	31.058	32.071
ANNUAL OPERATING COST	6.900	7.100

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	179	10	68	111
CIVILIAN	1057	150	612	445
TOTAL	1236	160	680	556

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
947	611.201	19.708	125.916	756.825	20.500	60.268

...MISSION  
CONDUCTS AND SUPPORTS AF RELEVANT RESEARCH AND EXPLORATORY DEVELOPMENT  
IN ENVIRONMENTAL, ENGINEERING, AND PHYSICAL SCIENCES WITH MAJOR EMPHASIS  
ON GEOPHYSICS AND ELECTRONICS. ALSO CONDUCTS AND SUPPORTS SPECIFICALLY  
ASSIGNED ADVANCED DEVELOPMENT EFFORTS.

...CURRENT IMPORTANT PROGRAMS  
IONOSPHERIC MAPPING AND FORECASTING FOR COMMUNICATIONS  
SHORT RANGE TERMINAL FORECASTING  
RADIATION HARDENING OF DEVICES AND INTEGRATED CIRCUITS  
OPTICAL AND INFRARED BACKGROUND MEASUREMENTS  
DENSITY SATELLITE MEAS FOR LOW ALTITUDE ORBITAL SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
CONDUCTS RESEARCH AND TECHNICAL DEVELOPMENT IN TERRESTRIAL, AEROSPACE,  
OPTICAL, AND SOLAR PHYSICS, IN EM WAVE PROPAGATION, AND IN ELECTRONICS,  
ENERGY CONVERSION, SOLID STATE AND INFORMATION SCIENCES RELATING TO AIR  
FORCE NEEDS. EQUIPMENT AND FACILITIES INCLUDE RADIO AND OPTICAL TELE-  
SCOPES FOR SOLAR RESEARCH. S,X, AND L BAND RADARS AND A C-130 AIRCRAFT  
FOR METEOROLOGICAL RESEARCH. ROCKET AND BALLOON LAUNCH FACILITIES, TWO  
KC-135 AND A C-130 AIRCRAFT FOR OPTICAL, UPPER ATMOSPHERIC AND NEAR  
SPACE STUDIES. FACILITIES FOR GROWTH OF ELECTRONIC MATERIALS,  
A VAN DE GRAAFF ACCELERATOR, COBALT 60 SOURCE, 12 MEV LINAC, 29 FOOT  
MILLIMETER WAVE ANTENNA ALL FOR ELECTRONICS RELATED PROGRAMS, AND A  
CDC 6600 COMPUTATIONAL NETWORK.

INSTALLATION EASTERN TEST RANGE, PATRICK AFB, FLA.

C.O. MAJ GEN D.M. JONES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	154.856	0.000
TOTAL PROCUREMENT	0.029	0.000
TOTAL O+M	2.429	0.000
TOTAL OTHER	48.294	0.000
TOTAL ANNUAL LAB	205.600	0.000
TOTAL INHOUSE	45.775	0.000
TOTAL INHOUSE RDT+E	23.556	0.000
ANNUAL OPERATING COST	26.013	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			TOTAL PRCF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHD'S			
MILITARY	1726	44		402	1244
CIVILIAN	2104	1		220	1884
TOTAL	3830	45		722	3128

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
18222	133.860	385.767	7916.900	8436.527	372.053	648.499

...MISSION  
BALLISTIC MISSILE TESTING R+D  
SPACE LAUNCH  
OASO  
OT/FOT

...CURRENT IMPORTANT PROGRAMS  
MINUTEMAN 3  
ATLAS/AGENA USAF PROGRAMS  
TITA 3  
POLARIS  
POSEIDON

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
GUIDANCE VERIFICATION/MISTRAM  
TRACKING SHIP  
TELEMETRY MISSILES/SATELLITES  
RDR TRACKING MISSILES/SATELLITES  
IMPACT SCORING  
TELEMETRY SHIP  
TELEMETRY AIRCRAFT  
PHOTOGRAPHY  
DATA PROCESSING  
SPACE AND MISSILE LAUNCH FACILITY  
COMMUNICATIONS  
COMMAND/CONTROL

INSTALLATION FLIGHT DYNAMICS LAB., WPAFB, OHIO

C.O. COL C.A. SCOLATTI CHIEF SCIENTIST DR. DEMETRIUS ZONARS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	60.668	54.083
TOTAL PROCUREMENT	0.464	0.500
TOTAL O+M	0.665	0.700
TOTAL OTHER	0.149	0.200
TOTAL ANNUAL LAB	61.946	55.283
TOTAL INHOUSE	15.748	19.990
TOTAL INHOUSE RDT+E	15.748	19.990
ANNUAL OPERATING COST	4.066	4.325

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	136	15	57	39
CIVILIAN	720	29	419	301
TOTAL	856	44	516	340

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
90	537.300	56.600	26.000	619.900	22.900	52.750

### ...MISSION

PLAN AND EXECUTE USAF EXPLORATORY AND ADVANCED DEV PROGRAMS FOR AEROSPACE FLT VEHICLE STRUCTURES FLT MECHANICS FLT CONTROL VEHICLE DYNAMICS AND VEHICLE EQUIPMENT PROVIDE TECH OR MGT ASSIST IN SUPPORT OF STUDIES ANALYSES DEV PLANS TEST EVALUATION MODIFICATION OF AEROSPACE SYS AND EQUIP

### ...CURRENT IMPORTANT PROGRAMS

1. DEV AUTOMATIC CREW ESCAPE INITIATION AND TEST COMPOSITE LANDING GEAR. 2. DEV STRUCTURE CRACK PROPAGATION DES. GUIDE. 3. DES ION FLT INSTR TO PREDICT ENGINE FAILURE. 4. MODIF. DRONE TO FLT DEMONSTRATE REMOTELY PILOTTED VEH AND DES. FAB. TEST SMALL SCALE RPV. 5. ENHANCE TRANSONIC MANEUVERING AND PERFORM TECH AND INVEST DETECTABILITY OF MIL QUIET A/C.

### ...FUNCTIONS/EQUIPMENT/CAPABILITIES

AFFDL HAS 18 MAJOR R+D TECHNICAL FACILITIES WITH A CAPITAL REPLACEMENT VALUE OF 132M DOLLARS. INCLUDED ARE WIND TUNNELS, STRUCTURES TEST FACILITY, BALLISTIC IMPACT RANGES, SONIC FATIGUE CHAMBERS, FLIGHT CONTROL TECHNIQUES AND INSTRUMENT LABS. AND RESEARCH SIMULATION FACILITIES, ENVIRONMENTAL CHAMBERS, LANDING GEAR TEST FACILITY AND A VERTICAL WIND TUNNEL. THE HORIZONTAL WIND TUNNELS TEST SIZE RANGE UP TO 8FT DIAMETER AND SPEEDS FROM SUBSONIC TO MACH 15. MAIN STRUCTURES TEST FACILITY IS 251 FT L X 170 FT W X 160 FT MIN CLEAR HEIGHT PERMITTING STRUCTURAL TESTING OF FULL SIZE VEHICLES AND COMPONENTS WITH PROGRAM CONTROLLED SIMULATION OF FORCE AND THERMAL FLIGHT ENVIRONMENTS. THE LARGE SONIC TEST CHAMBER IS 70 L X 56 X 42 H INSIDE DIMENSIONS AND PROVIDES ACOUSTIC CAPABILITY OF 1 MILLION WATTS AT ABOUT 1,000 CPS.

INSTALLATION FLIGHT TEST CENTER, EDWARDS AFB, CALIF.

C.O. BRIG GEN ROBERT M. WHITE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	41.498	39.253
TOTAL PROCUREMENT	0.183	0.591
TOTAL O+M	0.896	0.962
TOTAL OTHER	25.479	30.123
TOTAL ANNUAL LAB	68.056	70.929
TOTAL INHOUSE	59.248	63.181
TOTAL INHOUSE RDT+E	33.852	32.451
ANNUAL OPERATING COST	7.828	7.866

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	3121	62	647	2474
CIVILIAN	1828	0	198	1630
TOTAL	4949	62	845	4104

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
300723	939.933	406.022	5908.879	7254.834	210.705	423.445

...MISSION

PLAN/CONDUCT QUANTITATIVE ENG, DEV, TEST + EVAL OF MANNED/UNMANNED AERO VEH. EVAL INCL AERODYN PERF/STAB/CONTR, SYS + SUBSYS, GNC SUPT EQUIP. MAINTBLTY/RELIBLTY, ACFT ARRESTORS, AERO DECELRTS, CONDUCT RSCH TO SPT MSN .OPR AERO RSCH PILOT SCH. SEPARATE NASA, DOD TENANTS + GOV CONTRACTORS.

...CURRENT IMPORTANT PROGRAMS

F-111A/D/F SYS/PROG 324A SPEC WEAP TST, PER+FLY QUAL, AND SYS CAT I+II  
F-4 FOLLOW ON SYS/PROG 327B/C TWEAD, TISEO, LEAD EDGE SLAT, WILD WEASEL  
UHIN/N SYS/PROG 443N  
COMPASS ARROW SYS/PROG 468A DRONE TEST + DEVELOPMENT  
ADV SPACE TECH/COMPONENTS SYS/PROG 69AJ PCHT+AERIAL RECOVERY TEST+DEV

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TECHNICAL FACILITIES AND EQUIPMENTS ARE AVAILABLE TO PROVIDE A COMPLETE RANGE OF SERVICES FOR CONDUCTING CATEGORY FLIGHT TESTING OF AERONAUTICAL SYSTEMS, CONDUCT FLIGHT EVALUATION AND RECOVERY OR RETRIEVAL OF RESEARCH VEHICLES, TRAIN AEROSPACE RESEARCH PILOTS. ENGINEERING LABS, REALTIME INSTRUMENTED RANGES, DATA COLLECTION, REDUCTION AND ANALYSIS LABS, PHOTO/TV , ACFT/ENGINE/MAINT, TEST EQUIP, AND ELECTRONICS SHOPS ALONG WITH A COMPLEX OF DRY LAKES FOR RECOVERY AND EMERGENCY LANDING PROVIDES VARIOUS SUPPORT ALL TEST PROGRAMS. OTHER MAJOR FACILITIES ARE- PRECISION IMPACT, GUNNERY/BOMB, PHOTO RESOLUTION AND IR, RADAR FIDELITY, TACTICAL, + OPTICAL RANGES, CONTRACTOR ASSIGNED HANGARS, SHOPS, LABS, AND OFFICE SPACE MUNITIONS STORAGE AND CHECKOUT, JOINT PARACHUTE TEST FACILITY AT EL CENTRO NAF, ENGINEERING SIMULATION LAB, AND BARRIER/ARRESTING GEAR COMPLEX.

INSTALLATION FRANK J. SEILER RESEARCH LAB., ACADEMY, COLO.

C.O. COL MILTON D. SPRINKEL CHIEF SCIENTIST LTC HAROLD BECK

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	0.635	0.570
TOTAL PROCUREMENT	0.635	0.570
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.331	0.320
TOTAL ANNUAL LAB	1.601	1.460
TOTAL INHOUSE	1.601	1.460
TOTAL INHOUSE RDT+E	0.635	0.570
ANNUAL OPERATING COST	0.014	0.019

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	25	16	18	7
CIVILIAN	13	1	3	10
TOTAL	38	17	21	17

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
0	9.394	2.860	0.240	12.494	1.270	1.466

...MISSION

CONDUCT RESEARCH IN AEROSPACE MECHANICS, APPLIED MATHEMATICS + CHEMISTRY. ENCOURAGE + SUPPORT ACADEMY FACULTY + CADET RESEARCH BY DIRECT PARTICIPATION, MONITOR FACULTY CONSULTANT PROG, SUMMER LAB PRCG. FOCAL POINT FOR USAF ACADEMY RESEARCH PROPOSED TO THE DOL RES+TECH LABORATORIES AFSC

...CURRENT IMPORTANT PROGRAMS

FUEL CELL AND BATTERY STUDIES-ALUMINUM ANODES IN MOLTEN SALT ELECTROLYTE SYNTHESIS AND CHARACTERIZATION OF ORGANOMETALLIC MONOMERS + POLYMERS -- OPTIMIZATION PROGRAMING AND CONTROL MATH MODELS GUIDANCE SYSTEMS DIFFERENTIAL GAMES IMPERFECT INFO, NONLINEAR CONTROL THEORY + ESTIMATES MECH OF FLUIDS LOW DENSITY SHOCK WAVES, RAM-WING THEORY, AERODYNAM SHAPES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MATH OPTIMAZTION CONTROL AND GUIDANCE SYSTEMS USING BURROUGHS B5500 COMPUTER. ORGANOMETALLIC + ELECTROCHEMISTRY + NITROALIPHATIC AND FLUORONITROALIPHATIC CHEMISTRY USING 6 POSITION LAB + INSTRUMENT ROOM CONTAINING BANAL NUC MAG RESONATOR SPECTROMETER, X-RAY EQUIPMENT, INFRARED SPECTROPHOTOMETER, MASS SPECTROMETER, AUTOMATIC GAS CHROMATOGRAPH + OTHER EQUIP. FLUID DYNAMICS RESEARCH USING 17 INCH LOW DENSITY SHOCK TUBE AND ASSOCIATED INSTRUMENTATION, 2 INCH HIGH DENSITY SHOCK TUBE + WIND TUNNELS. ADVANCED ANALYSIS AND EVALUATION TECHNIQUES FOR INERTIAL GUIDANCE SENSORS USING TWO-AXIS TEST TABLE GYRO, AUTOMATIC AZIMUTH ALIGNMENT EQUIP AND ELECTRONIC CONTROL EQUIPMENT FOR 50 SERIES INERTIAL DEVICES LOCATED IN CLASS 1000 CLEAN LAB ON 80 TON AIR SUPPORTED STABLE PLATFORM.

INSTALLATION HUMAN RESOURCES LAB., BROOKS AFB, TEX.

C.O. COL GEORGE K. PATTERSON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	9.355	10.092
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.978	1.252
TOTAL ANNUAL LAB	10.333	11.348
TOTAL INHOUSE	3.882	4.472
TOTAL INHOUSE RDT+E	2.904	3.214
ANNUAL OPERATING COST	0.742	0.836

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	134	10	73	61
CIVILIAN	207	27	82	125
TOTAL	341	37	155	186

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
13	63.830	24.390	8.430	96.650	1.850	3.976

...MISSION

PRINCIPAL AF INTERFACE WITH SCIENCE, INDUSTRY AND OTHER GOVT AGENCIES FOR MANAGEMENT OF BASIC, EXPLORATORY, AND ADVANCED DEVELOPMENT R D PROGRAM IN PERSONNEL SELECTION, MANAGEMENT AND TRAINING, AND THE EVALUATION OF NEW TECHNICAL DEVELOPMENTS FOR APPLICATION TO AF PROBLEMS.

...CURRENT IMPORTANT PROGRAMS

HUMAN FACTORS IN DESIGN OF TRAINING SYSTEMS. SIMULATION TECHNIQUES FOR AEROSPACE CREW TRAINING. ADVANCED INSTRUCTIONAL SYSTEMS AND ADVANCED SIMULATION FOR UNDERGRADUATE PILOT TRAINING. DESCRIBING, EVALUATING AND STRUCTURING AIR FORCE OCCUPATIONS. DOD MANPOWER DEVELOPMENT PROGRAM EVALUATION AND IMPROVEMENT.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FUNCTIONAL AREAS OF OCCUPATIONAL ANALYSIS, PERSONNEL PROCUREMENT, PERSONNEL CLASSIFICATION, RETENTION AND SEPARATION PERSONNEL SYSTEM SIMULATION MODELS, MANPOWER REQTS OF AF WEAPON SYSTEMS TRAINING TECHNIQUES, DESIGN OF SIMULATORS AND OTHER TRAINING DEVICES CAPABILITIES, STUDY TRAINING PROBLEMS ASSOCIATED WITH VEHICULAR CONTROL OPERATOR TASKS, CHECKOUT AND MAINTENANCE OF ELECTRONIC EQUIPMENT TECHNICAL AND PROFESSIONAL LIBRARY, PERSONNEL TESTING ROOMS AUDIO VISUAL EQUIPMENT, RESEARCH SIMULATOR COCKPIT INFINITY OPTICS DISPLAY, RAYTHEON PB440 DIGITAL COMPUTER IBM 7040 ELECTRONIC DATA PROCESSING SYSTEM WITH 6 TAPES DISC FILE CARD READ/PUNCH PRINTER AND INQUIRY STATION VISUAL DISPLAY DEVICE CRT ELECTRONICS ASSOCIATES TR48 ANALOG COMPUTER.

INSTALLATION MATERIALS LAB., WPAFB, OHIO

DIR. DR. A.M. LOVELACE CHIEF SCIENTIST DR. S.W. TSAI

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	37.752	38.980
TOTAL PROCUREMENT	15.800	12.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.800	0.800
TOTAL ANNUAL LAB	54.352	51.780
TOTAL INHOUSE	5.904	6.192
TOTAL INHOUSE RDT+E	5.104	5.392
ANNUAL OPERATING COST	2.000	2.000

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	57	13	66	0
CIVILIAN	357	47	252	105
TOTAL	414	60	318	105

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
9	0.213	0.022	0.038	0.273	6.600	9.600

...MISSION

PLAN, FORMULATE AND EXECUTE RESEARCH, EXPLORATORY AND ADVANCED DEVELOPMENT AND MANUFACTURING METHODS FOR NEW MATERIALS OF ALL CLASSES IN SUPPORT OF THE AF MISSION. ACT AS AFSC FOCAL POINT FOR MATERIALS TECHNOLOGY INFO. INSURE TIMELY TRANSITIONING OF NEW MATERIALS AND TECHNOLOGY TO AF SYSTEM

...CURRENT IMPORTANT PROGRAMS

MATERIALS AND TECHNIQUES FOR A/C STRUCTURAL INTEGRITY AND RELIABILITY.  
MATERIALS AND TECHNIQUES FOR AF WEAPONS SURVIVABILITY AND HARDENING  
TACTICAL AND LIMITED WARFARE MATERIALS AND TECHNOLOGY SUPPORT.  
MANUFACTURING TECHNOLOGY OF NEW MATERIALS FOR SYSTEMS APPLICATION  
ADV COMPOSITES, METALS AND ALLOYS FOR AIRFRAME AND PROPULSION STRUCTURES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MATERIALS RESEARCH AND DEVELOPMENT FACILITIES AND CAPABILITIES FOR  
AEROSPACE STRUCTURES, TIPS FOR BALLISTIC RV. ENGINES, FLUIDS, LUBRICANTS,  
FLUID CONTAINMENT, PROPULSION, COATINGS, FIBERS, ARMOR, EM WINDOWS, SENSORS,  
DISPLAYS, LASERS AND OPTICAL DEVICES, ELECTRONIC COMPONENTS, NON-DESTRUCT  
TESTING, POLYMERS, ADHESIVES, NONMETALLIC MATRIX COMPOSITES, ELASTOMERS,  
METALS, ALLOYS, METAL AND CERAMIC COMPOSITES, METAL PROCESSING,  
INTERMETALLICS, CERAMICS, STATIC AND DYNAMIC BEHAVIOR. JOINING, GRAPHITE,  
ELECTRONIC AND MAGNETIC MATERIALS. PHYSICAL CHEMICAL ANALYSIS. OTHER  
MAJOR MATERIALS FUNCTIONS- MANUFACTURING TECHNOLOGY, SYSTEMS APPLICATION  
SYSTEMS SUPPORT AND MANAGEMENT OF INFORMATION CENTERS, DOD DEFENSE  
METALS AND CERAMICS, THERMOPHYSICAL AND ELECTRONIC PROPERTIES, METAL  
MACHINABILITY, AND MECHANICAL PROPERTIES.

INSTALLATION ROCKET PROPULSION LAB., EDWARDS AFB, CALIF.

C.O. COL THOMAS A. MC CREERY CHIEF SCIENTIST DR. FRANK KELLY

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	26.407	26.215
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	2.300	2.564
TOTAL ANNUAL LAB	28.707	28.779
TOTAL INHOUSE	12.564	13.317
TOTAL INHOUSE RDT+E	10.264	10.753
ANNUAL OPERATING COST	0.275	0.265

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	267	15	107	160
CIVILIAN	386	11	113	273
TOTAL	653	26	220	433

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
54400	419.046	99.248	4.700	523.074	29.572	25.653

...MISSION  
PLAN, FORMULATE, PRESENT, AND EXECUTE THE AFSC EXPLOR AND ADV DEVELOP-  
MENT PROGRAMS IN ROCKET PROPULSION SYS, COMPONENTS, PROPELLANTS AND  
ASSOCD GND EQUIP. CONDUCT IN-HOUSE RSCH. ACT AS AFSC FOCAL POINT FOR  
INFORMATION IN THE ASSIGNED TECHNICAL AREAS.

...CURRENT IMPORTANT PROGRAMS  
INCREASE ICBM PAYLOAD SURVIVABILITY AND PENTRATION CAPABILITY. INCREASE  
LIFE, STATION KPG, AND POINT ACCURACY OF SATELLITE SYS. INCREASE ABILITY  
OF STRATEGIC ACFT TO PENTRATE TO THE TARGET. PROVIDE MAX PROPULSIVE  
MANEUVERING FOR SPACECRAFT. PROVIDE ROCKET PROPULSION DEVICES FOR HIGH  
ENERGY LASERS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
A COMPONENT TEST LAB AND CENTRIFUGE FOR TESTING SMALL PROPULSION SYS AND  
COMPONENTS UNDER SIMULATED SPACE ENVIRONMENTS. FACILITIES FOR FORMULATG  
AND TESTING IN RKT MOTORS SMALL QUANTITIES OF NEW SOLID AND LIQUID PRO-  
PELLANTS. A CHEM LABORATORY FOR SYNTHESIS, ANALYSIS, AND FORMULATION OF  
NEW PROPELLANTS. A SOLID MOTOR TEST AND EVAL COMPLEX FOR INVESTIGATION  
OF COMBUSTION, AGING, STRUCTURAL INTEGRITY AND EXHAUST PLUMES. AMBIENT  
AND ALTITUDE TESTING OF TOXIC RKTS UP TO 100,000 LB THRUST. HOT AIR CA-  
PABILITY TO TEST AIR BREATHING PROPULSION UP TO MACH 4.0, 100,000 FT ALT  
A FACILITY FOR TESTING RKT ENGINES UP TO 10,000,000 LB THRUST. IN-HOUSE  
ANALYTICAL CAPABILITY FOR W/S PROPULSION SYS OPTIMIZATION, TRADE-OFF  
AND MISSION STUDIES. A COMPUTER FACILITY FOR DESIGN, ANALYSIS, AND TEST  
DATA REDUCTION. FABRICATION SHOPS FOR EXPER TEST HWRE AND TEST SYSTEMS.

INSTALLATION ROME AIR DEVELOPMENT CENTER, GRIFFIS AFB, N.Y.

C.O. COL JOHN C. TOOMAY CHIEF SCIENTIST DR. JOHN S. BURGESS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	81.733	80.000
TOTAL PROCUREMENT	31.729	30.000
TOTAL O+M	5.354	5.000
TOTAL OTHER	38.651	33.490
TOTAL ANNUAL LAB	157.467	148.490
TOTAL INHOUSE	32.002	30.290
TOTAL INHOUSE RDT+E	26.155	25.600
ANNUAL OPERATING COST	6.775	7.144

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	324	1	184	140
CIVILIAN	1177	16	610	567
TOTAL	1501	17	794	707

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
2784	741.466	112.793	187.306	1041.565	24.958	91.264

...MISSION

PLANS AND EXECUTES EXPLORATORY AND ADVANCED DEVELOPMENT PROGRAMS FOR ELECTROMAG INTELLIGENCE AND RECON PROCESSING, DISPLAYS, SURVEILLANCE, RELIABILITY AND COMPATIBILITY, COMMUNICATIONS FOR AIR FORCE, DOD AND OTHER ORGANIZATIONS, PROVIDES TECHNICAL CONSULTATION TO MAJOR AIR COMMANDS.

...CURRENT IMPORTANT PROGRAMS

OVER THE HORIZON DETECTION EXPERIMENTS AND DEVELOPMENTS  
INTELLIGENCE AND RECON EXPLORATORY DEVELOPMENTS AND FIELD SUPPORT  
INTEGRATED COMMUNICATION NAVIGATION AND IDENTIFICATION TECHNIQUES  
SIGNAL PROCESSING TEST FACILITY FOR FINE GRAIN SATELLITE DIAGNOSIS  
ELECTROMAGNETIC RELIABILITY AND COMPATIBILITY TECH AND FIELD SUPPORT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PROVIDES A WELL BALANCED COMBINATION OF PROFESSIONAL SKILLS AND EXPERIMENTAL FACILITIES TO MARRY THEORETICAL STUDIES TO POTENTIAL APPLICATION. BY COMBINATION OF AIRBORNE LABORATORY MEASUREMENT IN INSTRUMENTED FLIGHT TEST AIRCRAFT AND FLEXIBLE ON-BASE AND OFF-BASE EXPERIMENTAL SITES, A HIGH DEGREE OF SOPHISTICATION IS ACHIEVED FOR CONDUCTING GROUND ELECTROMAGNETIC STUDIES AND EXPERIMENTS. CAPABILITIES ARE AVAILABLE FOR CONDUCTING HIGH AND LOW-POWER EXPERIMENTS OVER ELECTROMAGNETIC SPECTRUM FROM EXTREMELY LOW FREQUENCIES TO LIGHT. SCIENTIFIC STUDIES ARE PERFORMED USING ONE OF THE NATIONS LARGEST ON-LINE TIME SHARING COMPUTERS. RESOURCES ARE PRIMARILY USED IN EXPLORATORY AND ADVANCED DEVELOPMENTS AND EXTENDING TO TECHNICAL SUPPORT THIRTY-FIVE OTHER AIR FORCE AND DOD ORGANIZATIONS.

INSTALLATION SPACE + MISSILE TEST CENTER, VANDENBURG AFB, CALIF.

C.O. BRIG GEN JESSUP D. LOWE TECH. DIR. S.R. RADOM

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	73.680	74.181
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	6.320	6.829
TOTAL ANNUAL LAB	80.000	81.010
TOTAL INHOUSE	37.350	34.644
TOTAL INHOUSE RDT+E	31.030	27.815
ANNUAL OPERATING COST	57.280	61.413

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PRCF
MILITARY	585	0	249	336
CIVILIAN	494	1	195	299
TOTAL	1079	1	444	635

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
45526	91.407	354.384	431.954	877.745	298.980	505.933

...MISSION

MANAGE SPACE AND MISSILE FIELD TEST OPERATIONS. INSURE TIMELY DEVELOPMENT OF TEST CAPABILITY INCLUDING PERSONNEL, FACILITIES, INSTRUMENTATION AND DOCUMENTATION.

...CURRENT IMPORTANT PROGRAMS

MINUTEMAN 1,2,+3 OPERATIONAL TESTING  
SAFEGUARD SYSTEM TEST TARGET PROGRAM-MINUTEMAN TITAN BOOSTERS  
ABRES PROGRAMS  
CLASSIFIED SPACE PROGRAM LAUNCHES USING ATLAS, THOR TITAN BOOSTERS  
MINUTEMAN 3 R D

...FUNCTIONS/EQUIPMENT/CAPABILITIES

SAMTEC CAPABILITIES INCLUDE TEST LAUNCH AND RANGE SUPPORT. THE FORMER INCLUDES VEHICLE PAYLOAD CHECKOUT, ASSEMBLY, PRELAUNCH TESTING FOR BOOSTERS/WEAPON SYSTEMS SUCH AS THOR. ATLAS, TITAN 2 3, MINUTEMAN 3. THE LATTER INCLUDES BOTH LONG SHORT RANGE INSTRUMENTATION PLANNING SCHEDULING OF ORBITAL, BALLISTIC PROBE LAUNCHES. A VARIETY OF LAND BASED MOBILE INSTRUMENTATION IS AVAILABLE ON THE WEST COAST, ON ISLANDS IN THE PACIFIC ON SHIPS AIRCRAFT TO PROVIDE RANGE SAFETY TEST DATA IN SUPPORT OF LAUNCHES. AVAILABLE LAUNCH AZIMUTHS RANGE FROM 165 TO 330 DEGREES. INSTRUMENTATION CAN BE RECONFIGURED TO MEET NEW PROGRAM REQUIREMENTS. ENGINEERING SEQUENTIAL METRIC PHOTOGRAPHY IS AVAILABLE. IMPACT SCORING OF BALLISTIC WEAPON PAYLOADS IS AVAILABLE AT TWO DOWNRANGE SITES AND IN THE BROAD OCEAN AREA.

INSTALLATION USAF SCHOOL OF AEROSPACE MED., BROCKS AFB, TEX.

C.O. COL EVAN R. GOLTRA

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	11.221	11.639
TOTAL PROCUREMENT	0.188	1.130
TOTAL O+M	0.678	0.837
TOTAL OTHER	6.806	4.878
TOTAL ANNUAL LAB	18.893	18.484
TOTAL INHOUSE	15.921	15.057
TOTAL INHOUSE RDT+E	8.275	8.248
ANNUAL OPERATING COST	2.659	3.281

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	603	93	206	397
CIVILIAN	406	41	178	228
TOTAL	1009	134	384	625

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
93	LAB	ADMIN	OTHER	594.674	15.281	20.621
	442.830	93.330	58.514			

...MISSION

RESEARCH IN LIFE SUPPORT AND AEROSPACE MEDICINE.  
BIOLOGICAL SCIENCES.  
CLINICAL EVALUATIONS.  
EDUCATION AND TRAINING.

...CURRENT IMPORTANT PROGRAMS

BIOLOGICAL EFFECTS OF RF, NUCLEAR, AND COHERENT RADIATION.  
CREW REQUIREMENTS FOR EFFECTIVE OPERATION OF AF SYSTEMS.  
DEVELOPMENT OF AEROMEDICAL EQUIPMENT AND SYSTEMS.  
MEDICAL SELECTION AND MAINTENANCE OF AIR FORCE CREWS.  
DRUG DETECTION AND SCREENING STUDIES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

USAF SCHOOL OF AEROSPACE MEDICINE - RESEARCH IN AEROSPACE MED PROBLEMS.  
ENVIRONMENTAL STRESS, DEVELOPMENTAL ENGINEERING, RADIATION BIOLOGY, LASER  
HAZARDS, BIOMETRICS, BIOSCIENCE, BIOMED ENGINEERING AND EPIDEMIOLOGY  
FACILITIES. WHOLE BODY COUNTER, HUMAN CENTRIFUGE. VARIOUS TEST CELLS AND  
CHAMBERS, COCKCRAFT - WALTON ACCELERATOR, NEUTRON GENERATOR, PHILCO 2000  
DIGITAL COMPUTER, ROTATIONAL FLIGHT SIMULATOR, KILO-CURIE CO-60  
RADIATION SOURCE. AEROSPACE MEDICAL SCIENCE LAB, AEROSPACE MEDICAL  
CONSULTATIVE SERVICES, AEROMEDICAL EVALUATION. CLINICAL SCIENCE, OCULO-  
THERMAL, RESEARCH OPTICAL, AUDIOLOGY, VESTIBULAR, PSYCHOBIOLOGY, RADIO-  
ISOTOPE, AEROSPACE MEDICAL STANDARDS, AND LASER HAZARDS FACILITIES.  
ZEISS PHOTO-COAGULATOR, VECTORCARDIOGRAPH MACHINE, BALLISTOCARDIOGRAPH  
MACHINE, PHONOCARDIOGRAPH MACHINE, AND MASS SPECTROMETERS.

INSTALLATION WEAPONS LAB., KIRTLAND AFB, N.M.

C.O. COL ROBERT W. ROWDEN CHIEF SCIENTIST MAJ W.A. WHITAKER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	67.226	88.606
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	8.990	9.300
TOTAL ANNUAL LAB	76.216	97.906
TOTAL INHOUSE	35.221	42.766
TOTAL INHOUSE RDT+E	26.231	33.466
ANNUAL OPERATING COST	0.873	0.982

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	800	84	555	205
CIVILIAN	454	18	201	253
TOTAL	1254	102	756	458

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1174	430.547	14.620	22.187	467.354	9.913	32.340

...MISSION

PLAN AND EXECUTE RSCH, EXPLOR, AND ADV DEV PRGMS IN NUC AND ADV WPNS EF-  
FECTS, COMPONENTS AND HAZARDS, NUC WPNS SAFETY AND DELIVERY TECHNIQUES,  
AND CIVIL ENGR. SPECIFY AND ASSESS SYS HARDNESS. PROVIDE TECH AND MGT  
ASSIST IN SYS STUDIES, ANALYSIS, ACQUISITION, TEST, EVAL, MOD AND OPER.

...CURRENT IMPORTANT PROGRAMS

NUCLEAR SURVIVABILITY/VULNERABILITY ANALYSIS AND TESTING  
NUCLEAR WEAPONS EFFECTS RESEARCH AND TESTING  
NUCLEAR SAFETY ANALYSIS AND DESIGN CRITERIA  
EXPLORATORY AND ADVANCED DEVELOPMENT OF LASERS  
LEAD LABORATORY FOR AIR FORCE CIVIL ENGINEERING TECHNOLOGY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

NUCLEAR WEAPONS EFFECTS RESEARCH, SIMULATION, SAFETY, TEST PARTICIPATION  
AND ANALYSIS OF WEAPONS SYSTEMS SURVIVABILITY/VULNERABILITY ARE CONDUCT-  
ED IN NUCLEAR ENGINEERING TEST LABORATORIES AND PHYSICS LABORATORIES.  
SIMULATION TESTS ON MISSILES AND COMPONENTS USE ELECTROMAGNETIC PULSE  
SIMULATORS, GAS GUNS AND PULSE POWER AND X-RAY DEVICES. CIVIL ENGINEER-  
ING RESEARCH, EXPLORATORY AND ADVANCED DEVELOPMENT USE SOILS, ENVIRON-  
MENTAL, AND CHEMICAL LABORATORIES AND SHOCK TUBES FOR SIMULATION AND  
TESTS. LASER RESEARCH, APPLICATION AND DEVELOPMENT IN THE LASER/OPTICS  
LABORATORY USE LARGE AND HIGH POWER DEVICES. TECHNICAL LIBRARY, METAL-  
LURGY AND METROLOGY LABORATORIES, AN EQUIPMENT POOL OF VARIED DIAGNOSTIC  
AND METERING DEVICES, DUAL CDC-6600 COMPUTER AND MULTI-CHANNEL RECORDING  
AND DATA REDUCTION SUPPORT RESEARCH AND TESTS.

INSTALLATION ARMED FORCES RADIOBIOLOGY RES. INSTITUTE BETHESDA, MD

MYRON I. VARON CAPT USN MC

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1971 (ACTUAL)	1972 (ACT + EST)
TOTAL RDT+E	2.905	2.969
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.814	1.021
TOTAL ANNUAL LAB	3.719	3.990
TOTAL INHOUSE	3.719	3.990
TOTAL INHOUSE RDT+E	2.905	2.969
ANNUAL OPERATING COST	1.081	0.990

PERSONNEL	PERSONNEL DATA (END OF FY 1971)			
	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PRCF	NON- PROF
MILITARY	67	17	38	29
CIVILIAN	147	13	39	108
TOTAL	214	30	77	137

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
10	24.660	14.906	32.913	72.479	6.135	2.551

...MISSION

THE MISSION OF AFRI SHALL BE TO CONDUCT SCIENTIFIC RESEARCH IN THE FIELD OF RADIOBIOLOGY AND RELATED MATTERS THAT ARE ESSENTIAL TO THE MEDICAL SUPPORT OF THE UNITED STATES MILITARY SERVICES, TO NATIONAL WELFARE, AND TO THE WELL-BEING OF MANKIND

...CURRENT IMPORTANT PROGRAMS

BIOCHEMICAL DIAGNOSIS OF ACUTE AND CHRONIC RADIATION EFFECTS  
DRUG MODIFICATION OF RADIATION INDUCED BEHAVIORAL DECREMENT  
PREDICTION OF INDIVIDUAL SENSITIVITY TO RADIATION  
EFFECTS OF HIGH DOSES OF IONIZING RADIATION UPON NEURON-TRANSMITTERS  
STIMULATION OF MARROW RECOVERY POSTIRRADIATION

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FUNCTIONS- OPERATE FACILITIES FOR CONDUCTING RADIOBIOLOGY RESEARCH AND DISSEMINATING RESULTS, CONDUCT ADVANCED TRAINING, OPERATE FACILITIES FOR PRODUCTION OF SHORT-LIVED RADIOISOTOPES, AND PERFORM OTHER SUCH RESEARCH FUNCTIONS AS REQUIRED. MAJOR EQUIPMENT INCLUDES PULSE AND STEADY STATE NUCLEAR REACTOR, 50,000-CURIE COBALT-60 IRRADIATOR, POSITIVE ION ACCELERATOR, ELECTRON MICROWAVE LINEAR ACCELERATOR, AND X-RAY MACHINES, WITH AN ASSOCIATED EXPOSURE ROOM COMPLEX. SUPPORT SERVICES INCLUDE MEASUREMENT OF RADIATION FIELDS, PROVISION AND CARE OF LABORATORY ANIMALS, EQUIPMENT DESIGN AND FABRICATION ASSISTANCE, REAL-TIME DATA ACQUISITION SYSTEM, TELEVISION AND FILM DOCUMENTATION OF EXPERIMENTS, PERSONNEL AND ENVIRONMENTAL MONITORING, EDITORIAL ASSISTANCE IN REPORT PREPARATION, AND A LARGE TECHNICAL LIBRARY.

APPENDIX I

Changes in Organization or Name \*

Department of the Army

Aeronautical Research Laboratory Ames Research Center Moffett Field, California	Deleted; functions transferred to the Air Mobility R&D Laboratory.
Air Mobility R&D Laboratory Moffett Field, California	First time listed.
Atmospheric Science Laboratory White Sands, New Mexico	First time listed.
Aviation Materiel Laboratories Fort Eustis, Virginia	Deleted; functions transferred to the Air Mobility R&D Laboratory.
Avionics Laboratory Fort Monmouth, New Jersey	First time listed.
Combat Surveillance Group Fort Monmouth, New Jersey	First time listed.
Communications and ADP Laboratory Fort Monmouth, New Jersey	First time listed.
Electronic Technology and Devices Laboratory Fort Monmouth, New Jersey	First time listed.
Electronic Warfare Laboratory Fort Monmouth, New Jersey	First time listed.
Electronics R&D Laboratory Fort Monmouth, New Jersey	Deleted; components reported as individual activities.
Night Vision Laboratory Fort Belvoir, Virginia	First time listed.
Nuclear Defense Laboratory Edgewood Arsenal, Maryland	Disestablished.
Research and Development Technical Support Activity Fort Monmouth, New Jersey	First time listed.

Department of the Navy

Atlantic Underwater Test and Evaluation Center West Palm Beach, Florida	Disestablished; activities merged with those of the Naval Underwater Systems Center.
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\*Changes since publication of MAR 70-4, 30 October 1970.

Department of the Navy (continued)

Environmental Prediction Research Facility Naval Postgraduate School Monterey, California	First time listed.
Naval Ship R&D Laboratory Annapolis, Maryland	Disestablished; functions transferred to the Naval Ship R&D Center in Washington, D. C.
Naval Ship R&D Laboratory Panama City, Florida	Same as above.
Naval Underwater Sound Laboratory New London, Connecticut	Disestablished; activities merged with those of the Naval Underwater Systems Center.
Naval Underwater Systems Center Newport, Rhode Island	First time listed.
Naval Underwater Weapons R&E Station Newport, Rhode Island	Disestablished; activities merged with those of the Naval Underwater Systems Center.
Naval Weather Research Facility Naval Air Station Norfolk, Virginia	Disestablished; some functions transferred to the Environmental Prediction Research Facility.

Department of the Air Force

6571st Aeromedical Research Laboratory Holloman Air Force Base, New Mexico	Deactivated.
Air Force Armament Development and Test Center Eglin Air Force Base, Florida	New name; formerly the Air Proving Ground Center.
Air Force Armament Laboratory Eglin Air Force Base, Florida	Deleted; merged with the Armament Development and Test Center.
Air Force Missile Development Center Holloman Air Force Base, New Mexico	Deleted; merged with the Special Weapons Center.
Air Proving Ground Center Eglin Air Force Base, Florida	Deleted; new name is Armament Development and Test Center.
Air Force Special Weapons Center Kirtland Air Force Base, New Mexico	Deleted; merged with the Missile Development Center.
Det 8, Office of Research Analyses Holloman Air Force Base, New Mexico	Discontinued.
USAF School of Aerospace Medicine Brooks Air Force Base, Texas	New name; formerly the School of Aviation Medicine.
USAF School of Aviation Medicine Brooks Air Force Base, Texas	Deleted; new name as listed above.

## APPENDIX II

### Definitions

1. *In-House RDT&E Activities*--Those organizational entities engaged in performing work in any or all of the categories of research, development, test and evaluation. The RDT&E effort, however, should represent a minimum of 25 percent of the total effort of each entity reporting in order to be considered as an RDT&E activity.

2. *Professionals*--Full-time government scientific and engineering personnel actively engaged in RDT&E activities. In the case of civilians, this will include all those holding positions that fall into the following categories under the Civil Service Occupational Groups and Series of Classes, General Schedule:

150	440	665	871	1330
180	454	668	880	1340
190	457	680	881	1350
193	460	690	890	1360
401	470	701	892	1370
403	471	801	893	1372
405	482	806	894	1382
410	486	808	896	1384
413	487	810	1301	1386
414	601	819	1306	1510
430	602	830	1310	1515
434	635	840	1313	1520
435	644	850	1315	1529
436	660	855	1320	1530
437	662	861	1321	1540

Military professionals, both officer and enlisted, actively engaged in RDT&E activities should be identified with the functions described in the above-referenced civilian job series. Generally, these jobs are referenced in Department of Defense Occupational Conversion Tables DoD 1312.1-0, DoD 1312.1-E under DoD groups 5 and 6 of DoD 1312.1-0, and various other groups of DoD 1312.1-E, published under the provisions of DoD Instruction 1312.1. Lawyers, accountants, chaplains, social workers and educators should be excluded.

3. *Technicians*--Generally nonprofessionals working on an RDT&E project or program in support of a professional. In the case of civilians, it will include, but will not necessarily be limited to, those holding positions that fall into the following categories of the Civil Service Occupational Groups and Series of Classes, General Schedule:

181	636	681	895
404	645	682	1311
421	646	683	1316
455	647	698	1341
458	649	699	1471
462	650	802	1374
621	661	817	1521
622	667	818	1531
625	669	856	1541

Discretion will have to be exercised by each RDT&E activity in determining the number of military technicians. Generally, they should follow the guidelines established in defining civilian technicians and can be identified in DoD 1312.i-E.

4. *Real Property Cost*--Each reporting activity will be responsible for determining and reporting the cost of real property. This cost should be established in accordance with the guidelines and definitions in DoD Instruction 4165.14. This should also include the cost of installed equipment.

5. *Equipment Cost*--Each reporting activity will be responsible for determining and reporting the cost of personal property. This cost will include those costs incurred by the acquisition (including installation, when applicable) of all property other than real property. It will include personal property such as machine tools, environmental test equipment, furniture, laboratory equipment, vehicles, etc. Items having a unit cost of less than \$200 may be excluded.

6. *Space*--The data to be furnished should include only walled and roofed building space. It should not include such things as parking lots, open storage areas, lean-tos, etc. The source of data may be the annual report submitted in compliance with the requirements of DoD Instruction 4165.14.

7. *In-House Obligations*--Obligations reported under this category are for activities performed, or to be performed, by the organizational entity. Their work is carried on directly by their own personnel. Particular care should be taken to include under in-house performance the cost of supplies and equipment essentially of an off-the-shelf nature that are procured for use in in-house research and development, plus such things as travel, publications, and other types of services in support of in-house functions. Excluded from the in-house total are expenses for planning and administering programs by DoD personnel (including military) of contracts and grants for out-of-house work.

8. *Out-of-House Obligations*--Obligations reported under this category are for activities performed, or to be performed, by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions, and private individuals. Included as out-of-house work are all expenses paid the out-of-house performers, as well as the expenses incurred in planning and administering these programs by personnel of the organizational entity. This would also include travel and other supporting services.

9. *Annual Operating Cost*--This should generally reflect the overhead cost of operating the laboratory or facility. It should include such things as costs of utilities, rents, janitorial services, guard and fire protection, support services such as supply personnel, printing, maintenance of buildings and grounds, etc. It should not include the salaries of direct labor personnel such as scientists, engineers, technicians, draftsmen, machinists, etc.

## APPENDIX III

### Selected Standard Abbreviations and Acronyms

AAM -- air-to-air missile	GCA -- ground-controlled approach
AAW -- anti-air warfare	HF -- high-frequency
ADPE -- automatic data-processing equipment	IFF -- identification, friend or foe
AEC -- Atomic Energy Commission	IR -- infrared
AEDC -- Arnold Engineering Development Center	MPT -- military potential test
AFMDC -- Air Force Missile Development Center	NAF -- Naval Air Facility
AFSC -- Air Force Systems Command	NASA -- National Aeronautics and Space Administration
AFWET -- Air Force weapons effectiveness testing	NASC -- Naval Air Systems Command
AMC -- Army Materiel Command	NAVORD -- Naval Ordnance Systems Command
APG -- Aberdeen Proving Ground	NAVSHIP -- Naval Ship Systems Command
ARPA -- Advanced Research Projects Agency	NEMP -- nuclear electromagnetic propagation
ASW -- antisubmarine warfare	PI -- product improvement
AUS -- Army, United States	POL -- petroleum, oil, lubricants
BIS -- Board of Inspection and Survey	QA -- quality assurance
BW -- biological warfare	QMDO -- qualitative materiel development objective
CBR -- chemical, biological, radiological	QMR -- qualitative materiel requirement
CE -- Chief of Engineers, Army	RDT&E -- research, development, test and evaluation
CG -- commanding general	RF -- radio frequency
CNO -- Chief of Naval Operations	RV -- reentry vehicle
COMMEL -- communications electronics	SATS -- short airfield tactical support
DA -- Department of the Army	SDR -- small development requirement
DASA -- Defense Atomic Support Agency	SI -- ship installation
DoD -- Department of Defense	SP -- self-propelled
DZ -- drop zone	ST -- service test
ECM -- electronic countermeasures	T&E -- test and evaluation
ECOM -- Electronics Command, Army	TOTO -- Tongue-of-the-Ocean
ED -- engineering development	UDT -- underwater demolition team
EDT -- engineering development and test	ULMS -- Undersea Long-Range Missile System
EEG -- electroencephalogram	USATECOM -- U. S. Army Test and Evaluation Command
EKG -- electrocardiogram	UTTAS -- utility tactical transport aircraft system
ELINT -- electronic intelligence	USW -- undersea warfare
EMP -- electromagnetic propagation	UV -- ultraviolet
EMW -- electromagnetic warfare	V/STOL -- vertical/short takeoff and landing
EODC -- Explosive Ordnance Disposal Center	
ET -- engineering test	
EW -- electronic warfare	
FA -- field artillery	
FBM -- fleet ballistic missile	